

**TEXT FLY WITHIN
THE BOOK ONLY**

**TEXT CROSS
WITHIN THE
BOOK ONLY**

UNIVERSAL
LIBRARY

OU_164365

UNIVERSAL
LIBRARY

INDIAN RAILWAY ECONOMICS

PART III

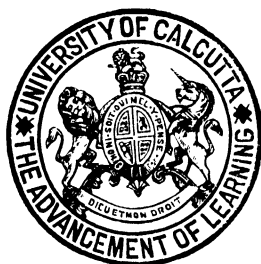
LECTURES
ON
INDIAN RAILWAY ECONOMICS

(RAILWAY MANAGEMENT)

PART III

BY
S. C. GHOSE,

HONORARY LECTURER, CALCUTTA UNIVERSITY, POST-GRADUATE TEACHING IN ARTS
[FORMERLY OF THE G. I. P. RY. AND THE E. I. RY. ;
LATE GENERAL MANAGER OF THE B. K., A. K., K. F. AND B. D. R. RYS.
AND ALSO FOR SOME TIME SPECIAL OFFICER WITH THE RAILWAY BOARD
GOVERNMENT OF INDIA, RAILWAY DEPARTMENT.]



PUBLISHED BY THE
UNIVERSITY OF CALCUTTA

1923

PRINTED BY BHUPENDRALAL BANERJEE
AT THE CALCUTTA UNIVERSITY PRESS, SENATE HOUSE, CALCUTTA

To
The secret memory
of
MY MOTHER

PREFACE

This third part of "Indian Railway Economic Series" deals with present-day problems affecting Railway management, such as, State *versus* Company management of our State-owned railways ; grouping of railways ; organisation of the railways and of the Government of India Railway Department ; economies in railway working ; measures necessary to expedite movements of traffic, trains and wagons ; coal traffic transportation ; purchase and manufacture of railway materials and stores ; Indianisation of railway services in the higher grades, etc., etc.

The question of railway rates having been dealt with in Part I, issued towards the end of 1922, and also very fully and completely, in 1918, in Government of India Railway Department publication called "Monograph on Indian Railway Rates," of which I was the author, as well as in my first book published in 1911 under the title "Indian Railways and Indian Trade," it was considered unnecessary by me to deal with railway rates again in the present book, although I have briefly touched upon railway rates here and there, where necessary ; for the purpose of dealing with the problems discussed in this book I would, however, like to add that the railway rates policy of the Government of India "must be considered and settled on the basis of a national policy and this should be done with justice and equity," regard being had to the main factors that the Indian Railways are the property of the Indian taxpayers, that they were made for the benefit of the people and that as such they should help towards the economic, industrial and social development of the country first and foremost, although for the purpose of the existence of railways it is necessary that they should be paying concerns but not merely dividend-earning propositions, pure and and simple.

There is one more point, which I would like to mention. Since the book was taken in hand I have seen two very interesting articles in the *Aurita Bazar Patrika* in the editorial columns of that paper of the 14th April and the 19th April, 1923, which, if the information of the *Patrika* " is correct, disclose that State management is opposed by certain people as they fear that State management means Indianisation. These two articles of the *Patrika* have so far gone unrefuted. Sir George Godfrey, the Agent of the B. N. Railway, in a speech delivered last February at a meeting of the Rotary Club, opposed State management of Indian Railways. We now see that one of the chief officials of the B. N. Railway, and his European colleagues, object to State management on the ground that this would mean Indianisation of the Railway services. In this connection, one can do no better than quote the following extracts from the editorials of the *Patrika* and I do so with the permission of the editor of the Paper. In its issue of 14th April it was said as follows :—

"On the 18th March 1923, a meeting was held in the B. N. R. European Institute over which Mr. Hill presided. In his presidential address he unburthened his heart to his European audience and made it clear that the Khalasis are to be removed in the interest of the Europeans of the Company. In referring to the decision of the Government to work the G. I. P. and E. I. Railways as State Railways he said :

'That means Indianisation of Railways in this country and it is highly probable that by Indianising Railways the idea is to economise, and to effect this the Legislative Assembly of the Government of India may think it advisable to economise by the introduction of cheaper labour.'

'There was no immediate apprehension of converting the B. N. R. into a State Railway, said he, but the Government of India can issue orders for company-worked lines to economise in "certain directions." And they may order to economise in a direction which is likely to affect the interest of the Europeans. Such a disaster has to be averted, and Mr. Hill urged his

audience to remember that as "Britishers" they are responsible "for our future generations" and asked them to look ahead and make provision for "our children and grandchildren."

"From the speech it seems that Mr. Hill is not only a great patriot but also a great politician. He wants to make provision for not only his children but he even remembers the grandchildren. In a fit of patriotic zeal he said :

"I would be very sorry to see Indian Drivers driving our Mail and Passenger trains and I sincerely hope that it will be many a long day before we are driven to adopt such measures."

"Mr. Hill has devised a scheme to avert such a catastrophe. If the Company removes all Khalasis (who at present assist the Drivers) the very source from which the Indian drivers are recruited will be cut off. Loco Foreman Brown correctly remarked in the course of a speech in the meeting 'If we can do this little thing we are going to have a very big political asset. Look deeply into this point, because the Khalasi is an apprentice to fall into your work.'"

Again on the 19th April, the following appeared in the editorial columns of the same paper :—

"Indian Khalasis were hitherto employed to do all the dirty work which the European and Anglo-Indian drivers and firemen would not do. But now that the question of the reduction of expenses has come up, and as there is some fear of this reduction affecting the European and Anglo-Indian staff, the Indian Khalasis are to be sacrificed to save the former. No sane man, of course, will have any objection to the reduction of expenses, and if Khalasis are really superfluous they should certainly be done away with. But one is inclined to ask : If the Khalasis had all along been superfluous, as it is now made out, why have they been retained so long ? Why were not the drivers and the firemen required to do from the beginning what such railway employees are accustomed to and required to do in other countries ? Another question which one would like to have an answer to is this : Why were not Indian drivers admitted to this meeting ? Was it not implied in what the

Chief of the Loco Department of the B. N. Ry. said and did that the Indian drivers did not count and that all that he wanted was the loyalty of the European and Anglo-Indian drivers ?

“It is to be hoped that the proceedings of this meeting will open the eyes of those few Indians, who seem to have a leaning towards Company management of Indian Railways. A few Indian Assistant T. Ss., Assistant Auditors or Assistant Engineers are merely eye-washes. The real object of the agitation of the European and Anglo-Indian community and particularly of the Railway companies to have companies for the management of our Railways and to have half the Directors (if Indian Companies come) from amongst Europeans is to prevent Indianisation of Railways and the Chief Mechanical Engineer of the Bengal Nagpur Railway distinctly says that State management means Indianisation.

“In the light of the above facts, the objects of the meeting clearly stand out as follows:—(a) to prevent Indianisation of posts now and hitherto held by Europeans and Anglo-Indians; (b) to so arrange matters as to let the brunt of the reduction fall on the Indian staff; (c) to have no apprentices, who are Indians, on the engines, to work with a view to become engine drivers in the future; (d) to remove the Khalasis from the engines, where they could learn engine-driving, but yet to use them in breaking coal, oiling, etc., on reduced salaries, at halting and engine-changing places.

“When the Chief Mechanical Engineer of the B. N. Ry. said that he would be very sorry to see the day when the B. N. Ry. mail trains are run by Indian drivers, he used the terms ‘our mail trains.’ Does he know that from the beginning the B. N. Ry. was an assisted company, most part of the capital having been provided by the Government of India? Was he aware of the fact that the B. N. Ry. was for many years worked at a loss, which was borne by the Indian Government? What makes him forget that the B. N. Ry. is the property of the Indian tax-payers and not of the European and Anglo-Indian staff and that the Company working the lines are mere lessees ?”

Since these articles were published the Khalasis have been re-instated, but the fact remains that the Company officials do not apparently favour State management because they are afraid that this would lead to Indianisation of Railway Services which shows that so long as the present Railway policy continues there is little chance of Indianisation of Railway Services.

Most of the matter contained in this book has already appeared in public prints, such as the *Amrita Bazar Patrika* in which the greater portion of my articles appeared. I am indebted to the Editor of this paper for publishing them. My thanks are also due to the Editors of the *Calcutta Review*, the *Calcutta Commercial Gazette*, the *New Empire* and of the *Bombay Chronicle* for their courtesy in giving ready publicity to my writings.

I tender my grateful thanks to the Hon'ble Justice Sir Asutosh Mookerjee, Kt., C.S.I., M.A., D.L. etc., etc., President, Councils of Post-Graduate Teaching in Arts and Science, for encouraging me to write these books and I acknowledge the help and assistance rendered by Mr. Pramathanath Banerjee, M.A., B.L., and Mr. Jogeschandra Chakravorti, M.A., Registrar, Calcutta University.

There is a strong rumour that the handing over of the D. U. K. to the N. W. R. and of the E. I. R. Jubbulpur-Naini line to the G. I. P. Railway and the amalgamation of the O. & R. Railway with the E. I. Railway are settled facts. There is no objection to these actions unless it is that the Oudh and Rohilkhand State Railway Company is going to be made over to the East India Railway Company for purposes of working. Somehow, people say that inspite of all protests from the people the latter will be done and that this was one of the objects of the Grouping. I have discussed this fully in Chapter VI of this book. If with the amalgamation of the O. & R. Railway with the E. I. Railway, Company management for both is introduced it will be in opposition to the wishes of the Indian people, against

the recommendations of the " Majority group " of the Acworth Committee and in direct opposition to the Resolution of the Legislative Assembly, passed last February.

53, LANSDOWNE ROAD.

CALCUTTA.

June 1923.

}

S. C. GHOSE.

CONTENTS

	PAGE.
Introduction	1
CHAPTER I.	
State <i>versus</i> Company Management of Indian Railways (A Discussion on Acworth Committee's Report)	6
No difference in the present management of State Railways by State or State-owned Railways by Companies	8
Company-managed lines of India—extravagant payment of salaries	12
More labour troubles on Company lines than on State lines	15
Rates policy of companies injurious to internal trade and internal industries of India	16
Conflict of interests between Companies and the State	20
No money for Indian Railways has been raised by companies without the guarantee of the Secretary of State	22
No difference between companies of Indian domicile and companies of English domicile	24
Ton Mileage for Engine (in 1000 miles)	29
Average Mileage run per Engine per Diem	29
Average weight of Goods Trains	30
Summary	33

CHAPTER II.

	PAGE.
Past Management of Indian Railways not beneficial to India	43

CHAPTER III.

State Management of Indian State Railways ...	46
---	----

CHAPTER IV.

Necessity for State Management and reforms in the organisation of Indian State Railways and their policy	52
---	----

CHAPTER V.

Alteration in the form of State Management ...	58
Government of India Railway Department Re- organisation	62

CHAPTER VI.

Grouping of Railways and organization of each group	66
---	----

CHAPTER VII.

Traffic and Train Control	74
----------------------------------	----

CHAPTER VIII.

Railway Expenditure and Indianization of Services necessary to effect economic working ...	83
---	----

CHAPTER IX.

Indians on Company-worked State lines ...	89
---	----

CHAPTER X.

Stores Purchases and Manufacture and Surpluses ...	94
--	----

CHAPTER XI.

	PAGE.
Economics on Indian Railways and State management	98

CHAPTER XII.

Third Class Passengers and High Fares ...	102
---	-----

CHAPTER XIII.

Intermediate Class Passengers	108
--------------------------------------	-----

APPENDIX I

(to Chapter V of this book).

Re-organization of the Railway Department of the Government of India and of the Indian Railways	1-17
--	------

APPENDIX II

(to Lectures on Indian Railway Economics, Part I).

Equal Mileage Rates	1-7
----------------------------	-----

APPENDIX III

(to Lectures on Indian Railway Economics, Part I).

Route Competitions and Rates adjustments in consequence thereof	1-2
--	-----

APPENDIX IV

(to Indian Railway Economics—Transport Series—Part II).

Coal Traffic Transportation	1-15
------------------------------------	------



INTRODUCTION

It has recently been remarked by a few persons that although the Assembly voted in favour of State management of our railways the question is far from being settled. It is true that the Government of India and the Secretary of State have yet to say what they would do, but it is feared in certain quarters that the question may again be referred to the Legislative Assembly and that a resolution might be moved to continue the present company management for at least five years. Sir Campbell Rhodes practically made this suggestion but it was not accepted, and it is therefore not likely that the same resolution will be repeated, but it may come up in some other form during the next session, for the supporters of company management have not yet given up hopes.

The people and the Government have to consider what is best for India and its people. An argument is being raised in certain quarters that the Indian Railways should be managed by companies irrespective of ownership; they argue that while the State should own and construct railways, companies should be employed to manage them.

The whole problem of State or Company management is one to be determined according to the geographical position, and the industrial, economic, political and social conditions of the country concerned rather than according to the merits claimed for Company management or State management in other countries.

To apply to India conditions of England or America, where the population is rich, the country and its resources fully developed and where the railways are owned by private corporations, is entirely wrong. As just remarked these two countries are vastly developed in their industries whereas India is yet in its

infancy so far as its industries are concerned, and the report of the Industrial Commission and of the Fiscal Commission prove this. India is a country of long distances, and requires internal development of industries and commerce, whereas the management of railways in the past was more favourable for export of India's raw materials abroad and for import of foreign goods than for development of Indian industries. The railway managers felt that this was the right policy but the people of this country have all along felt otherwise. Then, the Indian railways, although owned by the Government of India and the Indian taxpayers, are far from being managed by Indians in as much as all the administrative and the executive appointments (both in the superior and the upper subordinate grades) are very largely held by Europeans and Anglo-Indians.

The introduction of Indian companies is proposed in place of English companies and in preference to State management. But these Indian companies are not going to own the railways, but are to have a certain percentage of the capital, and in the beginning not more than 20 per cent. or so. In any case, the financial responsibility for repayment of debts due by railways, and for future loans and for making up of deficits in the guaranteed interest is to be that of the Government of India and the tax-payers.

The country is not rich, and the population is poor, and they require cheap travelling, and their goods cheap rates, and in this respect the Government policy ought to be to run the railways on these lines, so long as they are self-supporting, *i.e.*, to use them as paying public works, not only to earn money for the public treasury but to promote the economic and industrial development of the country. The broad features of the South African State Railway policy are said to be—

“low rates for raw materials for manufacture, agricultural produce, minerals and other raw products of the country, with a view to stimulating agricultural and industrial development, especial low rates are granted for long-distance traffic and the flat and tapering rates principles have been largely adopted ;

passenger fares, have been substantially reduced, *particularly for suburban and long distance traffic*. On Southern African Railways internal and commercial development has also been stimulated by low distribution rates, designed to afford inland traders equality of opportunity, as regards railway tariffs, in competing with coastal merchants for the interior trade."

Very much the same things are required in India. Then the main issue is that the Indian trunk lines have already been nationalised so far as ownership is concerned and it is only right that the Indian nationalised railways should be managed by the owners themselves. In no other part of the world railways are managed by any others than the owners themselves. The Government have admitted that, in the past, there has been no difference in the efficiency between the State management and lessee company management of State-owned railways.

There is a great deal of difference between the ownership and management by and on behalf of a few private individuals and the ownership and management by the State on behalf of and for the good of the people. Again, half Government interest and half shareholders' interest are neither private enterprise nor management for the benefit of the country. The functions of State railways may be described as twofold: First to earn revenue for the public treasury and this must be the object for some time to come, that is, until the finances of India are placed on a sounder footing than now. But at the same time, in view of the fact that development of Indian industries will lead to the earning of greater revenues for the Government and prosperity to the people, the Indian State-owned railways should also eventually be worked for the benefit of India's industrial and agricultural advancement. But from the point of view of both advancing these latter interests and of working the Indian railways efficiently (taking Indian railways as a whole), it is essential that the individual interests of each particular company should give way to the broader interests of the people who are the real owners and also at the same time the users of the railways.

Compared to State management even companies of Indian domicile would not be of much use and the effect of real private enterprise would be nowhere unless at least 40 per cent. of the capital is private and there is no guarantee of dividend. But the money to such a large extent would probably have to be brought from England. It may either be invested by the original owners of such money through their agents in India, or by Indian middlemen who would reap the benefit of the difference between the cheaper rate of interest paid to British financiers and the minimum Government guaranteed dividend of 5, 6 or 7 per cent. Naturally in such a case the control will be of the person who originally finances. We already know that while the materials for the State-worked State railways are purchased through the High Commissioner, who is now an Indian, the purchase of the materials for company-worked State railways is mostly done by the Directors. If English money has to be brought in, it is best brought as a loan merely on interest without any control. If, however, it is said that Indian capital would be forthcoming largely then also it is best that such money should be raised or borrowed direct by the Government as the national debt of the country, because the companies would not raise money without 5 or 6 per cent. guarantee of dividend and probably a share of surplus profits would have to be given in addition when the dividend is over 7 or $7\frac{1}{2}$ per cent. In the case of direct borrowing the Government would not be handicapped by having to consider the interests of a company in particular as they have to do at present; for instance, it was very clearly admitted by the Government in a public circular that although "through rates" on a sliding basis in booking between two or more railways would be justifiable in the interests of the public and would in the aggregate be paying, it may happen that one railway company might get less and another railway company more. But if all the railways belonging to the State were worked by the State, what was considered justifiable in the interests of the public, could be done without any such hesitation. Moreover when the

Indian Railways Act IX of 1890 was framed the then Law Member of Viceroy's Executive Council admitted that owing to the existence of the contracts with the companies, the powers of the committee in revising the Act at the time were restricted to the limitations in the contracts, and it was, therefore, that India did not get the full benefit by the English Railways Act at that time, although it was promised by the Government that endeavours would be made to give India that benefit. This detrimental factor will always remain so long as there are companies, their contracts and their individual interests, however small that interest may be compared with the interests of the Government and of the Indian people.

CHAPTER I

STATE *VERSUS* COMPANY MANAGEMENT OF INDIAN RAILWAYS

(A DISCUSSION ON ACWORTH COMMITTEE'S REPORT.)

The principle of management of State-owned railways by lessee companies is, as stated by the Railway Board, almost peculiar to India. It bears no similarity to company management of company-owned railways of England or of America. Each country has its own particular system of railway management and ownership. Some have national railways such as Germany, Italy, Belgium, Japan, while others have company-owned railways such as U. S. A. and England. And some other countries have both State-owned and company-owned railways, but they are in all cases managed by the owners, *i.e.*, the State-owned railways by the State and the company-owned railways by companies.

There are advantages and disadvantages of both State management and company management. But in India in the case of company management the ownership is that of the Government and this has always to be borne in mind. Where the country is fully developed, its resources are vast, and there is plenty of trade and commerce and industries, *i.e.*, there is plenty of money in the country, in that case, generally the indigenous capitalists provide money for railways both for purposes of investment and for further development of trade, commerce and industries. In such cases, the whole work of financing and building railways, devolves on private enterprise or is rather left to private enterprise. The Government have no financial responsibility there, and, therefore derive no direct benefits, in the way of revenue, from railways, although there are very great indirect benefits. But the Government control is not slack, in such cases, to protect

public safety and public interests. A popular or democratic Government can and does demand and sees that the railways conform to such laws and regulations as the public interests may require. In such cases, it is held that controlled private ownership of railways is better than uncontrolled State ownership. But in India it is neither private enterprise nor ownership nor is the State ownership uncontrolled.

On the other hand, Germany and Belgium have stuck to State railways, and still hold the view that State railways are meant for development of indigenous industries and are a protection against invasion of foreign trade to swamp out the country's manufactures by imports of foreign products.

In India, in the beginning, indigenous capital could not be found to build railways. Therefore, British-owned company lines were introduced, but the English capitalists demanded guarantee of minimum dividend and free land, and these were given. The Government felt the terms onerous and therefore made provisions for purchase of railways in the contracts with the companies. It was found that the guarantee of 5 per cent. minimum dividend took away incentive from the companies and led to extravagance in cost of construction and lack of interest to develop business. This was assigned to be one of the reasons why the State did not allow the companies to hold the railways up to the full lease of 99 years and the railways were purchased by the Government after 25 or 50 years of lease.

But after purchase of railways the railways were again handed over to the companies, who then held nominal shares in the concerns, to be managed by them on behalf of the Government, and in order to create an incentive the rate of guaranteed interest was reduced from 5 to 3, or $3\frac{1}{2}$ per cent., but a share of surplus profits was given.

Lord Lansdowne's Government was, however, very strong about Indian railways being owned, built and managed by direct agencies of State, but Lord Ripon's Government did not agree with this policy and reverted to the policy of continuing

State ownership combined with management by lessee companies.

In the opinion of some, company management is said to have the following advantages :—

- (1) There is the benefit of private enterprise and commercial management of railways, which combines with it healthy competition and efficiency.
- (2) The company management is not influenced by politics.
- (3) In India, it is said it is to the interest of companies to aim at efficiency to earn more money in order to gain a share of the surplus profits, because the lessee companies do not get on their share of capital a higher direct and fixed interest than $3\frac{1}{2}$ per cent. and anything in excess has to be earned in the way of surplus profits, after payment of interest on Government share of the capital, annuities in redemption of capital, interest on annuities, etc. This share is bigger for the Government and much smaller for the company.
- (4) The companies have the advantage of experienced and retired railway men from Indian railways to work as Directors on their Boards in London.

It is also claimed that company management would not be extravagant because of the management of each railway on the principle of commercial undertaking.

The whole question was thrashed out by the Acworth Committee and their report in five volumes (only four of which have, however, been made available to the public) contains a mass of interesting and useful literature in this connection.

No difference in the present management of State Railways by State or State-owned Railways by Companies.

In the first place, the majority group of the Committee of Enquiry did not find any difference between the management of Indian State Railways by direct State agency, and the

management of State-owned railways by companies of English domicile so far as efficiency was concerned, and the Railway Board themselves also admitted this in their evidence before the Committee. If there is any difference in the cost of operation of or in the earnings of the railways or in the working results it is mainly due to the situation of different railways and their varying traffic and other conditions. In some cases there is as much difference between two company-worked State lines (such as the E. I. Ry. and the G. I. P. Ry.) as between one State-worked State line and one company-worked State line. For instance, the cheap working expenses of say, the East Indian Railway (company-worked State line) or its enormous traffic are due to the favourable situation of the railway and to the traffic conditions of the railway, as stated in 1908, in the Imperial Gazetteer (the Indian Empire Series, Vol. III) in Chapter VII (which chapter again was written by the then Secretary to the Railway Board).

“.....it has been exceptionally well placed....The line passes through the richest and most populous districts of India, and serves many large and important cities. All the principal coal fields of India are situated on it, and for many years the only route to those lay over the East Indian Railway. As might have been expected under such circumstances the line has never lacked traffic.....Its goods traffic is greater than of any other railway.....In construction of the line the physical difficulties to be overcome were the few large rivers; and out of the whole length of 2,225 miles, no more than 345 have gradients steeper than 1 in 300.”

In speaking of the G. I. P. Ry. (another company-worked line) the same authority said :—

“The Great Indian Peninsula Railway was very costly to construct and although so favourably situated it has in most years been worked at a loss to the Government. The loss however grows less every year. In 1904 it was 4½ lacs.”

About the North Western State-worked Railway we find the following observations in the same Imperial Gazetteer :—

“It is now the longest railway under one administration in India.....It runs through the wheat granaries of India and populous cities and cantonments but it has been seriously handicapped by long stretches of strategic and semi-strategic lines.”

In connection with the old Madras Railway Company the Secretary to the Railway Board said :—

“at no period during its existence has the Madras Railway earned its interest charges during the full year.....Since the transfer of the East Coast State Railway to it its income has improved.”

In regard to the Eastern Bengal State Railway it was observed, “The line passes through a populous and fertile country.....while the Eastern Bengal Railway was worked by company, under a guarantee, and for some years later it usually caused a loss to the state, but since 1887 it has always yielded surplus profits after paying all interest charges.”

The B. B. & C. I. Ry. is favourably situated and important State and Native State Railways and branches were made over to it for working, which added to the prosperity of the railway, but unfortunately, so far as the Government of India was concerned, during the period of contract of the old guaranteed company “the B. B. and C. I. Ry. Company-owned system was worked at a loss to the state.....The loss was however always more than made good by the prospects of the Rajputana-Malwa Section,” which latter section was State-constructed and owned but “was made over to the B. B. & C. I. Railway Company for working.”

The above quotations speak for themselves, and certainly do not show the old guaranteed company management as advantageous.

The conclusions of the Acworth Railway Committee are well known.

The Committee was divided in its conclusions on the main issue of management of railways :

- (1) The Chairman and four members, *viz.*, Mr. Hiley, the Rt. Hon'ble Mr. Sastri, Mr. Purushottamdas Thakurdas, and Mr. Tuke declared in favour of State-management of State-owned Indian railways. This group may be called the majority group for it included the Chairman, amongst five.
- (2) The other half or five, *viz.*, Sir Henry Burt, Sir George Godfrey, Sir Henry Ledgard, Sir R. N. Mukherjee, and Sir Arthur Anderson, declared in favour of company management, with this modification that they recommended that in future the companies should not be English companies any longer but should be companies of Indian domicile with rupee-capital. For purposes of facilitating reference we may call this group of members as the minority group although the number was equal.

It is most essential to bring prominently to notice that the Companies at present working the Indian railways are not companies in the real sense of the word, in that they are not the owners of the property (at least not of the greatest part of it) and have no great financial responsibility in this sense that the money is provided for by the Government of India out of Budget grants, and the loans and debentures are raised on the security of and on the responsibility of the Secretary of State for India. Further even on the comparatively small holdings of the companies themselves, in the railways they manage, a minimum dividend is guaranteed by the Secretary of State. The Companies therefore really manage nationalised railways of ours on behalf of the Government, as lessees.

Thus the company-management of Indian railways is on a totally different footing to the company-management of English and American railways. In the case of the British or of the American railways the whole railway property,

including the railway land, is the property^d of shareholders, whereas in the case of the Indian railways the ownership is that of the Indian Government, and therefore of the Indian tax-payers.

At the end of March 1921, whereas the Government responsibility for share of capital in our State railways was 482 crores that of the lessee companies was 75 crores or thereabouts. It was plainly admitted in the majority report of the Acworth Railway Committee "that it was with the money secured from Indian taxation that the Indian Railways have been almost entirely built." And the Railway Board also in their evidence said that "the greater portion of the Indian railway property was owned by the Indian tax-payers."

*Company-managed lines of India extravagant
payment of salaries.*

The Railway Board, however, said in their evidence, in supporting company management, that in democratic countries State-management would mean

(1) Enlargement of staff and enhancements of pay.

(2) Elastic method of dealing with railway rates, which is not conducive to the public interest.

These two arguments were the main supports of the Railway Board in advocating company management on commercial grounds, but the arguments do not at all seem applicable to Indian State railways as will be demonstrated presently in this paper.

Some also argue that there would be labour difficulties with State railways and frequent occurrences of strikes.

First, in regard to large salaries it may be observed that the salaries on Indian State-worked State railways were for many years far lower than the salaries on the company-worked State lines—when the Agents and the Heads of Departments on the State-worked State railways (like the N. W. Ry.) were getting something like Rs. 2,500 and Rs. 1,600 respectively,

the persons holding similar appointments on the company-worked State railways were drawing Rs. 3,000 and Rs. 2,000 respectively. It was only because of the latter drawing higher salaries that the salaries of the former had to be raised.

The process of increasing the salaries on State-worked State railways started since 1903, when late Mr. T. Robertson the first Special Railway Commissioner for Indian Railways, pointed out as follows in his report :—

“As an example, the Manager of the North Western Railway who controls 3,750 miles of line, receives a salary of Rs. 2,500 a month. The Managers of the State lines until recently only received Rs. 1,600 a month, and even now one draws Rs. 2,000 and one Rs. 1,800. The Agents of the neighbouring company-worked lines receive Rs. 3,000 a month for managing railways nearly 1,000 miles shorter. Similarly, the Chief Traffic Officer of the North Western Railway receives Rs. 1,600 a month and of the other state-worked railways only Rs. 1,350 whereas those of the company-worked railways receive higher than Rs. 2,000.”

It will also be seen that it was because of the company railways officers drawing high salaries that Mr. Robertson, the Special Railway Commissioner, made the following recommendations :

“The scales of pay on state railways for Agents, heads of Departments and others should be brought more into line with those prevailing on the neighbouring Company-worked railways.”

This is how the salaries came to be first raised on Indian State-worked State railways. And when the salaries on State railways had been raised nearly to the same level as the salaries drawn on company-worked lines, there came fresh increases on the company-worked lines, whose Agents began to draw Rs. 3,500 and the General Traffic Managers and the other Heads of Departments Rs. 2,500 and salaries on state railways were also raised. But these salaries have now been again raised to Rs. 4,000 and Rs. 2,750 respectively, in some cases.

The above facts prove that the high salaries are due to company management and not State management.

Secondly, it is claimed that the company lines employed the most efficient staff to be found. This is not disputed, and it is but natural that this should be so, but the State railway officials must have been equally efficient because hitherto the Agents of the company-worked lines have and had been largely recruited from amongst Government officials, such as Col. Bisset, Col. Oliver and Col. Shelly—all sometime Agents of the B. B. and C. I. Ry. The present incumbent General Sir Freeland was also a Government Railway official. The G. I. P. Ry. also got its past Agent Major Hepper and the present Agent, Mr. McLean, from the same source, *viz.*, State railways. Col. Gardiner, Mr. Douglas, Mr. Marshall, three of the E. I. Ry. Agents, out of the past 6 agents, were likewise Government officials. Sir T. R. Wynne and Mr. Manson, former Agents of the B. N. Ry. had their training and experience in Government Railway service,—Col. Magniac, the present Agent of the Madras and Southern Mahratta Railway, Col. Izat, Agent of the B. and N. W. Ry., as well as Mr. Priestly, one of the late Agents of the S. I. Ry. were State railway officials, and Mr. Muirhead, one of the best General Traffic Managers of India and also late Agent of the S. I. Ry. was formerly Traffic Superintendent on the O. and R. State Railway before he became Traffic Manager on the S. M. Ry. and then General Traffic Manager of the G. I. P. Ry. and subsequently Agent of the South Indian Railway. Similarly some of the most successful of the Managing Directors and Chairmen of the several Indian Railway Companies on their Boards in England were Government men like General Sir Richard Strachey and Sir Frederick Upcott, Col. Gardiner, and Sir David Barbour, the past and present Chairmen of the E. I. Ry., Sir T. R. Wynne and Mr. Manson, the present and the past Managing Directors of the B. N. Ry., Mr. Priestly, late Managing Director of the S. I. Ry., Sir Henry Burt, the present Chairman of the B. and N. W. Ry. and R. and K. Rys.,

Col. Bisset and Major Shelly, Chairmen of the B. B. and C. I. Ry. and Col. Constable, Chairman of the Madras Railway, were all State Railway officials.

There have been two very recent and pointed instances in this connection, *viz.*, the cases of Mr. McLean and Mr. Alexander, the present Agent of the G. I. P. Ry. Company and the Chief Engineer of the B. N. Ry. Company, respectively. They were but Executive Engineers in State Railway Service, say $4\frac{1}{2}$ and 2 years ago. These two men were brought from Government service on company lines, superseding many senior men of the railways to which they were brought, thus proving conclusively that State railways also employ equally efficient staff.

Thirdly, as regards the argument that State working would involve frequent changes in the administrative staff. This may be so; but some of the principal company lines have not been free from such changes. It may be pointed out that within the last four years, there have been three changes in the permanent (not-officiating) Agency of the E. I. Ry. in the persons of Mr. Marshall, Mr. Hindley and Mr. Colvin, who successively became Agents since the retirement of Sir Robert Highet, which took place towards the end of 1918.

*More labour troubles on Company lines than on
State lines.*

Fourthly, as to labour troubles on Indian railways, we see that the railway strikes originated with the company lines; the first railway strike in India was amongst the European running staff on the G. I. P. Ry. Co.'s line, 25 or 26 years ago. The second strike was also on the G. I. P. Ry. among the Indian traffic station staff, 23 or 24 years ago (1899). The third strike was on the East Indian Railway (also company-worked line) amongst their European running staff. The fourth strike was also on the East Indian Railway, when the Indian traffic line staff stopped work. The fifth strike was also on the East Indian Railway, when the railway working was paralysed owing to the guards and drivers (European)

stopping work and going on strike, and trains and passengers were held up for days at Asansol. Before these strikes on company lines there had not been serious strikes on Indian State-worked State railways. Of course, there have been strikes on both State and company-worked State railways since, but even referring to the recent history of strikes it is seen that the most serious recent strikes on Indian railways were those on the E. I. Ry., and on the A. B. Ry.,—both company-worked lines—and these strikes lasted for long periods. So that it can hardly be said that company management would mean less labour troubles or less wages. In India, there are more labour troubles in company-managed and company-owned mills and factories than anywhere else. With the progress of industrialism in India these evils will have to be faced until labour realises the full value of capital to them and to the country.

Rates policy of companies injurious to internal trade and internal industries of India.

Fifthly, as to the apprehension that State-management would lead to more elastic methods of rate-making, this argument is neither clearly understood nor has it been fully explained.

So far as the management of Indian railways in regard to rates policy is concerned, the Government of India is required to give its decision regarding the principles to be followed in this matter. The Government have dictated and laid down the policy in the past, and they specified that railway rates-making should be done on commercial principles in the interest of each line. The Government will have to decide whether any change in the present (or, rather the past) policy is needed. Each railway, whether company-worked or State-worked, was allowed in the past to manipulate its rates in its own interests and even against the interests of other railways, in the matter of competition, if such an action was needed in the self-interest of any particular railway. One interesting illustration

of such a policy is to be found in the remarks of one of the managers of the Indian railways at a meeting in the Railway Board Office in the autumn of 1905. His recommendation was that the re-adjustment of rates should take place on the actual competitive basis, *i.e.*, the difference that would be reached if railways did their best for themselves and worst for their rivals, or in other words, if they quoted the lowest rates to the port or by the route that gave them the longest lead and the highest possible rates to the junction of railways serving ports which gave them short hauls. This suggestion was accepted in settling the Indian Railway rates war of 1905. So that so long as it is held that Indian railways should be run as commercial concerns, pure and simple, and managed in the individual interest of each railway it would make no difference, whether the railways are State-managed or company-managed.

But even in the system of rates-making on a commercial basis there is always room for discrimination in favour of traffic that would help the permanent advancement of the country and the ultimate good of the railways. Such discriminations are not really opposed to the interests of the railways or of the Government. For any concession granted for the real development of Indian industries or the internal trade must mean ultimately a direct addition to the revenues of the Indian railways, and also an increase in the Government resources in the shape of more income and super-taxes, resulting from the increase in the tax-bearing capacity of our industries and increase in the general prosperity of the country. And the concession rates granted to Tata's Iron-works is an example of this kind. And again, both the Railway revenue and the revenue from various sources of taxation go to the same public treasury. It may be that the adoption of the policy of developing our industries through railways may in a few cases mean only a temporary loss of revenue, yet the increase in prosperity that would ultimately be secured, would inevitably mean more economical working of our railways and higher net gains of the

railways as a whole, for the running of wagons to the ports simply with raw materials, meaning a considerable amount of return empty running of wagons is less economical than the running of wagons to mills and factories with raw materials and fuel and the returning of these wagons loaded with the finished goods and the bye-products. *But in any case a railway could never be expected or required to quote non-paying rates.* And this could never be demanded so long as it is recognised that the Indian State railways should be used for earning money for the public treasury. This is the avowed object of Indian State railways at present.

Moreover, the present system of fixing a minimum rate and a maximum rate by the Government will and must continue.

At the same time, the need for elasticity has been felt in the matter of through rates and such elasticity will be insisted upon whether the Indian State railways are company-managed or otherwise; the only difference is that State management will be distinctly advantageous in this respect as it would be in the matter of interchange, standardization and pooling of rolling stock and in connection with expenditure on one or two railways in extended and better yards and to facilitate work on those as well as on other railways. In this connection I would also invite attention to my new publication, *Indian Railway Economics (Transport Series), Part II.*

The need for application of low scale rates on through distances over two or more railways may be taken as a case in point. The non-application of through sliding and telescopic scales of rates over two or more railways is due entirely to the principle of each railway being worked in its own individual interest and to the share of the companies in the surplus profits. It is however wrong to suppose that there would be loss to Railways because of application of low scales of rates on through distances for development of through long distance internal traffic of India, for such development can only lead to more revenue, especially if rates are so manipulated as not to decrease earnings on traffic at present existing but reductions

are only made for distances where the traffic does not move at present and as a 'rates expert' I say that this can be attained in actual practice. I had worked this out for the Railway Board in 1917-18. So far back as 1903, Mr. Robertson, Special Railway Commissioner for India, unequivocally expressed his view in favour of the application of through scale rates. "On through traffic," he observed, "that is, traffic going over more than one company's line, all fares and rates should be calculated on the through distance (this is really expected by the Railways Act, but in practice is rarely done), and, the reduction should always be applied on the entire distance and not merely on the local distance of each railway. It is the practice that prevails in India of calculating rates on the distance to the junction only, which is to some extent responsible for a good many of high rates now obtaining, since the traffic only gets the benefit of sliding scales of rates on the local distance to the junctions, instead of on the whole distance that the traffic is carried. But if the long distance traffic is to be developed in the manner that such traffic has been developed in America, the distance must be taken from the station of origin to the station of destination, and the charges calculated on this through distance at the reduced rate." These were Mr. Robertson's own remarks. It may be interesting in this connection to point out that even in 1891, it was accepted by the Government and the East Indian Railway that there was justification for the concession to the public of lower rates over great distances and for large quantities, *and it was found that in the aggregate such rates were sufficiently remunerative.* But it was held that in cases where one company sent large quantities of traffic to a foreign line and for a long lead over that company's railway, it was a loss to the railway on which the traffic originated to accept low rates per mile for short distances, and this is why the matter was dropped, but the Government reserved to itself the right to impose the condition of applying the scales on through distances any time it liked, but this has never

been done although justification for its being done was accepted.

The latter portion of the above remark is important because quotation of low rates on through distances cannot mean any loss to the Government, who are the principal owners of the trunk railways, as such rates are accepted to be remunerative in the aggregate on the total distance, and the Government being owners of all railways it does not matter to the Government whether one railway or the other gets more or less so long as on the whole there is no loss but an improvement. But as the interest of each individual railway (however small that interest may be) has got to be taken into account in each company-worked railway, the public have been debarred from getting the benefit of low rates for through distances, especially in connection with internal traffic and this is clear from a circular issued by the Government in 1891. In cases like this, elasticity would be asked for whether railways are State-managed or company-managed, particularly as the application of through scale rates on through distances would develop internal traffic in India for long distances and go to increase railway earnings on the whole and in the long run. In the United States it is held that the aim of the railways should be to pay more attention to the internal trade as the prosperity of inhabitants is secured more by internal trade than by external trade especially where the agricultural and numeral resources are great.

But this elasticity will not be easily attained unless there is State management of all trunk lines and absence of individual interests of companies in matter like this at least.

Conflict of interests between Companies and the State.

Sixthly, the working of State railways by companies affords some cases of clash of interests between the Government as owner of the railways and the companies as their managers. One interesting example of such a conflict of

interest is to be found in the report of the Acworth Railway Committee in connection with the railway surtax. As the Committee pointed out, the surtax meant that the whole money went to the Government, instead of a share of it going to the working companies. The Committee said as follows :— “there is a further and serious objection to imposing a surtax on railway receipts instead of increasing railway charges, which is peculiar to India—that it is unfair to the shareholders, of the companies which divide profits with the Government. Had the railway rates been raised, the Government would have taken, in the case of the guaranteed companies, about nine-tenths of the additional net revenue. But the shareholders would have obtained what they are unquestionably entitled to, the remaining tenth. As it is, the Government takes the whole.” These remarks are absolutely fair and so long as the companies and their contracts remain they must get their share but this shows conflict of interests between the Government and the companies and the interests of the Government in such matters is the interest of the people of the country as well.

The method of division of surplus profits and the allocation of expenses between Capital and Revenue afford another such example of conflict between interests of the Government and of companies. These surplus profits are divided with the companies after all charges on account of interest and annuity payments are met. As is well known all heavy renewals such as replacements of rails, are charged to capital expenditure. Under the present system, when new rails are required, not because the old rails are worn out, but because heavier section rails are needed to haul heavier traffic with heavier engines, to meet the increasing open line railway business, the difference between the cost of the new rails and the purchase price of the old ones is debited to the capital account. In the case of such replacements, however, the correct procedure should be to debit a part of the cost of the new rails to the Revenue Account and to credit the same with the

proportionate sum, realised by the sale of the old rails. The reason for such a procedure is to be found in the fact that the replacement charge does not constitute expenditure on new construction, but is an expenditure for the purpose of meeting increased and increasing business, which again means more revenue to the existing open lines and the companies benefit by the increased revenue in the way of surplus profits without having to find money for the extra facility, for which money is found by the Government.

No money for Indian Railways has been raised by companies without the guarantee of the Secretary of State.

Seventhly, in connection with the evidence before the Acworth Committee urging for the necessity of having commercial and company management for attracting more capital, a portion of the evidence of the Railway Board may be quoted in this connection. The Railway Board said as follows :—

“.....At the present time, the need for more capital is so clamant that it is a matter of the first importance to show good commercial results, as otherwise the necessary capital will not be forthcoming,”

and these remarks came in the letter of explanation of the Railway Board, which they tendered to the Railway Committee giving reasons for supporting company management in their written evidence.

But as a matter of fact, however, the raising of money does not actually depend upon the prosperity of a particular railway. For when a loan has to be raised, a fixed rate of interest is paid, and that rate is based not on the earning power of the railway concerned, but on the market rate of interest prevailing at the time. The same rate would thus have to be paid on a loan, part of which may be spent on the E. I. Railway, a good paying line, and part on the A. B. Railway, a non-paying line.

So far as debentures are concerned, although, in the past, these were issued by particular railway companies, on the guarantee of the Secretary of State, the whole money had to be handed over to the Secretary of State and the money raised on the debentures of one railway could be spent on another. Of course, this is not to be the case in future, but nevertheless the raising of money on debentures will depend on the rate of interest offered and on the guarantee of the Secretary of State. No loan or debenture has been so far successful without the guarantee of the Secretary of State even if the prospects are good.

Moreover, both efficiency and commercial management of the Indian railways are not confined to company-worked lines. The State-worked State railways are run on commercial principles to earn money for the public treasury combined with efficiency both for service and for earnings.

In the case of loans, besides the loans being raised at the market rate of interest, there is the guarantee of the Secretary of State. Likewise the Indian railway debentures are not like ordinary debentures, which are practically deeds of mortgage given by a railway or other big companies for borrowed money. In the case of Indian Railway debentures, no mortgage of railways is involved. Consequently the good or bad financial results of a particular railway, in respect of which the debentures are issued, does not concern the debenture-holders. These latter rely absolutely on the guarantee and security of the Secretary of State, or in other words, if any mortgage may be said to be involved, it is the mortgage of India's resources as a whole.

In the case of branch lines too, the money is raised on the security of the Secretary of State and a guarantee of 6% minimum dividend is to be given by them in future. Further, in the case of new branch lines, interest at the rate of 5% has been agreed to by the Government of India to be paid to investors even during construction, such money as is in excess of 4%, during the construction period, is to be advanced by the Government of India till it can be realised when the railway is earning money.

Thus it is abundantly clear that the raising of funds for Indian Railways does not depend on the commercial results of a particular railway in respect of which the funds are to be raised. The success or otherwise of the railway loans or the raising of railway capital for Indian Railways is always due to the rates of interest that is paid, the condition of the money market, and above all to the guarantee of the Secretary of State.

No difference between companies of Indian domicile and companies of English domicile.

Eighthly, to deal with the proposal of replacing English lessee companies by Indian lessee companies.—In regard to the railway companies of Indian domicile, this was originally proposed by the Railway Board and then by the Minority Group of the Acworth Committee, but it is to be observed that it is neither intended nor suggested that these companies should take over, by cash payment to the Government, a very large share of the financial stake in the East Indian or the G. I. P. Railway (say at least half the capital in each) and thus become equal partners with the Government. It is only when company's share is sufficiently large, *i.e.*, at least half, that the suggestion regarding nomination of half the directors by the company may be accepted as reasonable but certainly not otherwise.

In connection with the proposed Indian Railway companies one can do no better than quote the following from the majority report of the Acworth Committee :

“An Indian Company would be a new creation, operating under a new contract. What would be the conditions on which these new companies would be established? What would be their constitution? What would be the nature of their contracts? Our colleagues propose that a new company should be constituted to manage the East Indian Railway, the bulk of its capital being issued to the Government; that it shall at the outset have a comparatively small amount of privately subscribed capital, say five crores of rupees; and that fresh

private capital shall be subscribed year by year as new money is required for the improvement and development of the undertaking, a figure which was put to us by the Agent of the Railway, as probably amounting to about five crores per annum. At this rate after five years the share of the capital held by private investors in the new company would be Twenty-one crores of rupees. The East Indian as capitalised at present has in round figures a capital of Rupees Eighty crores. At the end of five years, therefore, supposing the capital invested by the Government has not been increased, the company's investment would amount to only one-fifth of the total we fail to see why the Government should delegate any substantial responsibility to a body representing so small a share of the total capital at stake. We know of no company in which 80 per cent. of the shareholders depute their rights to the remaining 20 per cent. when as at the outset the new company's interest is less than $\frac{1}{10}$ the proposition seems still more courageous. If the Government were to recapitalise its interest in the net revenue of this very profitable undertaking on, say, a 6 per cent. basis, the proportionate interest of the new shareholders in the company would be very much less."

If a really fair distribution of capital is taken and the E. I. Railway is valued at the present rate of construction its value would be at least double or say 160 crores and thus the respective shares of the Government and of the company would be 160 crores of the Government and 20 crores of the company or say 90 and 10 per cent. respectively. Sir Thomas Catto speaking at the half-yearly General Meeting of the Bengal Coal Company on 21st December 1922, said that if he were to choose between the so-called company management of Indian Railways and the State management he would choose the latter.

If, however, a company with at least half the interest in a railway property at its present rate of construction and value including half the cost of the land, and also if in the matter of further capital expenditure half the funds required for renewals, improvements, etc., were provided for by the company it could then be said that the interests of the railway and of the Government (therefore of the public) would be alike. Also in the case of a property like that of the East Indian

Railway, it should not be necessary to give a guarantee of dividend at all and then only there would be a real incentive on the part of the managing companies to economise and to increase revenue. If all these conditions were fulfilled it could then have been claimed that the country would get the real benefit of private enterprise and incentive and initiative of company management in the matter of economy, improvements and extended facilities but not otherwise. This is what Sir Thomas Catto also asks for. But these conditions cannot be expected to be fulfilled for a variety of reasons. In the first place, it would not be possible, at the present moment, to get within the country money to the extent of half the capital of railways like the E. I. R. or the G. I. P. Railway and with Indian companies it is really intended that money should be raised in the country, that is, it should not be imported capital and thus be 'rupee capital' only in name. Secondly, with the object in view that the Railways must contribute to the public treasury so as to be great and substantial assets to the Government in the long run (when all the debts and liabilities are cleared off) it would not be advisable on the part of the Government to part with the property in railways at the present stage, after so much money has been spent and heavy losses borne for them by the tax-payers. Therefore, it seems hardly necessary that the company element should be re-introduced for purposes of management especially when it has not been at all proved that State railway management in India is less efficient than company management.

Even if the taking over of the management of G. I. P. and E. I. Railways by the State agency would involve the addition of two extra Commissioners, an extra inspector, an extra assistant Secretary and half a dozen more assistants for the Railway Department, Government of India, over and above what the reorganization proposed by the Acworth Committee demands, as well as appointments of one or two extra officers in the store purchasing Department in London, State management would still be less expensive than the cost of maintenance

of separate Boards of Directors and for each of these Railways and the payment of a share of surplus profits. Moreover, above all, under State management the disadvantage of dual control by the Railway Board and by the Company Board would disappear.

Ninthly, and above all in connection with the efficiency of management it has been declared that there is little to choose between the company-managed State lines and the State-managed State lines. In this connection, the majority group of the Acworth Committee observe as follows :

“ Para. 230.....“ We have found quite as much zeal for improvement, quite as much readiness to adopt new methods, on State Railways as on the Company lines. This conclusion is identical with that reported in the Government of India's Despatch No. 18, Railway, of the 17th August, 1917, to the Secretary of State which stated their ‘ unanimous view that so far as efficiency is concerned, there is really nothing to choose between a company-managed line in this country and one under State management.’ It is also identical with that of the present members of the Railway Board, whose considered opinion in a written statement which they submitted to us in Delhi is that ‘ Judging from the evidence of results and from our own experience in administration, there is no ground for supposing that either system of management is intrinsically superior to the other.’ And this is what might naturally have been expected, for the methods of management of the two classes are substantially the same. The only important difference is that the agents of the companies have the assistance of expert and experienced Boards in England. And this expert assistance and experience our colleagues (*i.e.*, the gentlemen who subscribed to the railway report) agree it is advisable for them to forego.” The remarks of the majority group of the Acworth Committee on the point of efficiency are quoted in full, and they are borne out by the evidence placed before it.

The minority group of the Acworth Committee in favouring the abandonment of the policy of managing railways

through lessee companies domiciled in England and recommending their replacement by Indian Companies remarked as follows:—

“We need not discuss further the arguments for and against the continuance of the London Boards. The weight of evidence in India rejects the present system of management by companies domiciled in England, and for the reason stated in section I of this chapter, and notwithstanding the valuable services rendered by the companies in the past we are in agreement that that system should be changed, according as the several contracts can be determined.”

In connection with these remarks the majority report says that if the minority report is prepared to abandon the London Boards, where the advantage of company management was that they had the services of retired experienced Railway officials from India, they fail to see the necessity for company management again.

Tenthly, the minority group in supporting Indian Company management further observed that—

“Following on the quasi-independence of the companies, Government has deemed it advisable to endow the Agents of the State-operated lines with powers similar to those granted to the agents of the several companies with the result that the former has been free from that amount of petty control and interference from head-quarters to which they would undoubtedly have been subjected, had there been State working only in India.”

These remarks, however, do not appear to be correct. On the other hand, it is proved that the extensive powers given by the Government to the managers of the State Railways were the real reasons for greater powers being given to companies and by companies to their agents.

According to the report of the late Mr. Robertson (Sir T. Robertson afterwards), even the companies themselves were only given greater powers because the Government had given the State Railway managers far greater powers than the companies had been previously given, and this was clearly stated in the report of Mr. Robertson. who used the factor of great

powers given to State Railway managers as the basis of his recommendation for more powers to be given to the companies.

Eleventhly, the minority report of the Acworth Committee supports company-management on grounds of better working results. In making comparisons between the working results of the State railways and of the company railways the minority group took the average of the averages of five railways managed by companies and compared them with the average of the average figures of three railways directly managed by State agency.

As has been already observed at the outset there is as much difference between two company lines as between a State line and a company line, and this has been very clearly and fully demonstrated.*

For a correct appreciation of the truth in the above-mentioned statement, it is necessary to examine the following examples cited by the minority group of the Acworth Committee:—

Ton Mileage for Engine (in 1000 miles).

If we take the three company-worked lines E. I. R., B. N. R. and G. I. P. R. for comparison, we shall find that while the first shows the mileage per engine at 13,288 and the second shows it at 10,319, the corresponding figure for the third one is only 8,995. Thus the figure for the O. and R. Ry. which stands at 9,537, when compared with say 10,819 on the B. N. Ry. or 13,288 on the E. I. R. is not at all unsatisfactory.

Average Mileage run per Engine per Diem.

In this respect, while the G. I. P. Ry. (a company line) shows 59 miles per engine, the O. and R. Ry. shows 58 and the E. B. Ry. shows 57 miles, so that there is no appreciable

* See pages 61 to 71 of a reprint of Part I of my lectures on Indian Railway Economics; issued and published by the Calcutta University. The facts and figures given in these pages disprove any assertion that the difference in results is due to management by State or by companies.

difference between the G. I. P., O. and R., and E. B. Railways in this respect. But it is at the same time interesting to note that while the E. I. Railway, a coal-despatching and company-worked line, shows a mileage of 79, the B. N. Ry., another coal-carrying and company-worked line, shows a mileage of 69, *i.e.*, 10 miles per day less than the E. I. Railway. The comparison is interesting because both the lines are company-worked and as such it cannot be regarded as a proof of low efficiency on the part of the B. N. Railway management; the difference is due to the traffic and other conditions, which differ on the two railways.

Average mileage per wagon per annum of the same two company-worked lines, the E. I. Ry. and the B. N. Ry.; the former shows 23,007 miles while the latter shows only 13,619. Compared with this big difference, the difference between the G. I. P. Ry. figure (14,392), the N. W. Ry. figure (12,772) and the E. B. S. Ry. figures (12,659) is significantly small. (For there can be no comparison between the E. I. Railway, with its exceptional conditions, and the other lines).

Average weight of Goods Trains.

So far as freight weight is concerned the State lines are on a better footing than company-worked lines, such as, the B. B. and C. I. Railway and the G. I. P. Railway. The actual figures are:—

for the E. I. Ry	...	...	326	Tons
for the B. N. Ry	...	...	315	„
for the G. I. P. Ry.	...	...	248	„
for the B. B. and C. I.	...	...	279	„
for the N. W. Ry. (State)	...	...	307	„
for the O. and R. Ry. (State)	...	...	296	„

These differences, it must be explained, were due not to the inherent superiority of the State or company working, but to the different traffic conditions and different circumstances of working which prevail. For instance, although the E. I. Ry.

and the B. N. Ry. are both coal-carrying lines, yet the E. I. Ry. passes through a more prosperous tracts and has heavy traffic in other goods which the B. N. Ry. have not got. It is this which really explains the difference between the freight weights of the two railways which are both company-managed.

On the other hand, both the G. I. P. and the N. W. Railways have to work under certain disadvantages, for while the former has to pass through a number of steep grades, the latter includes a large number of strategic and semi-strategic lines.

The O. and R. Railway, for instance, has to give up its traffic at the nearest junction, *viz.*, the Bombay traffic mainly at Cawnpore, or Bareilly, the Kurachee traffic at Saharanpur, the Calcutta traffic at Moghalsarai, because of its position as a feeder to all the important railways of Northern India. The result is that for almost the entire traffic the O. and R. Railway can get but short leads. On the other hand, the E. B. Railway is hampered by break of gauges and the intervention of big rivers between its own systems, and by a large volume of light load traffic in jute, which does not help good wagon loads and economic working. But during 1920-21 the O. and R. Railway did remarkably well and its working results were amongst the best in most respects.

This brief survey enables us to realise that there is substantial difference in traffic and working conditions amongst different railways and it is this difference and not the quality of the State or Company management which accounts for the divergent results in the working of different railways. And this has now been also admitted in Railway Board's Administration Report for 1920-21 (*vide* Chapter IV, para. 6, page 23).

It may be argued that if the E. I. R. and the B. N. R. have a heavy traffic in coal, the N. W. Ry. passing as it does through the "granaries of India" carry a big traffic in grain. But it is necessary to remember that grain trains are formed out of wagons distributed and picked up loaded from a very large number of stations over a system extending over

hundreds of miles. It is true that the coal-carrying lines too have to distribute and pick up wagons from several collieries, and that this operation is most difficult, but still the latter operation is confined to a much smaller area, where the traffic is concentrated.

But in spite of all the conditions described above, it is to be noted that on the N. W. Ry. (State), the percentage of freight upon capacity hauled was nearly 50%. The corresponding figure for O. and R. Ry. was 53% whereas that for the E. I. Ry. was 45%, for the B. B. and C. I. Ry. 43%, M. S. M. Ry. 49%. As has been previously stated, this difference too is due to local conditions and not to the inefficiency of company management.

The averages for five company lines taken together and three State lines taken together were as follows: and on such figures the minority group of the Acworth Committee drew their conclusions as to efficiency of company management over State management but this was not fair.

	Freight weight	Dead weight	Total weight
Company-worked lines ...	286	359	645
State-worked lines ...	274	389	663

Here the State lines are shown at a disadvantage so far as freight weight is concerned. But the actual state of things is, however, very different, for if we take individual railways, quite a different result is seen :—

	Freight weight	Dead weight	Total weight
B. B. & C. I. Ry.			
(Company) ...	279·84	386·21	666·05
	42%	58%	...
O. & R. Ry. (State)	296·72	355·92	652·64
	45%	55%	...

Here the O. and R. Ry. (State line) is at an advantage ; it had a better freight weight.

Taking another example, we find that the figures for the E. I. Railway and the N. W. Railway compared as follows:—

	Freight weight	Dead weight	Total weight
N. W. Ry. (State)	307·89	365·48	673·37
E. I. Ry. (Company)	326·87	426·75	753·62

Thus the percentage of freight weight to total weight was 45 per cent. on the N. W. Railway and only 43 per cent. on the E. I. Railway. Therefore the State Railway results were better and not worse. All the foregoing figures have been taken from the Acworth Committee Report. The working results were in all cases due to the traffic and working conditions of each railway and not to efficiency or in efficiency of the kind of management.

SUMMARY.

To summarise, again, the main arguments put forward in favour of Company management are—

(1) that private enterprise means efficiency, because of the commercial working of railways;

(2) that Company management, by showing good commercial results would further help to attract more money for Indian railways.

But the facts and figures given in this paper show—

(a) that there is no real private enterprise in the real sense of the term, because there is no risk, and very little financial responsibility on the part of the lessee companies;

(b) that the money for our railways is not attracted by the commercial working or the financial results of each railway, but by the guarantee of the Secretary of State which implies the security of the Government of India's resources;

(c) that State management has in the past shewn equal working and results under equal conditions with Company lines;

(d) that, as regards efficiency, there is no difference between the management of State lines by companies or by direct State Agency;

(e) and, that there would be as much control and elasticity in the matter of rates over State-worked State Railways as over company-worked State Railways;

(f) further that the emoluments and the staff are not more on State Railways than on company-worked State Railways.

By these remarks it is never for a moment implied that the railway companies have not done their duty in the past. On the contrary, they have played a very important part in the history of India and of the Indian Railways, but even the minority report of the Acworth Committee does not support company management, as it stands, as suitable. At least it does not make an attempt to defend it. Further the alternative of Indian company management suggested by the minority is not accepted by the majority report for reasons fully given by them, which has already been reproduced and discussed in this paper. It is very truly suggested by the majority report that there is no other instance than of Indian Railways where $\frac{4}{5}$ th partner of a concern hands over its property to the $\frac{1}{5}$ th partner for management.

The sole object of our railways and of their management should be to serve the interests of the country. It has not been proved that the State-worked State Railways of India do not serve such interests in the same way as the company-worked State lines do, and there is no reason why nationalised railways should not be managed by the State, that is, by the owners. In every other part of the world the owners manage the railways; where the companies own the lines they manage them and where the State owns the railways they are managed by the State. It is, therefore, only right that the same policy should be adopted in India, *i.e.*, the State should manage the railways it owns. That ought to come in the natural course of events. Also it should not be omitted to be mentioned that State railways can be worked in three ways:—

(1) either to obtain revenue for the public treasury from the profits,

(2) or to make expenses and to create public works out of railway revenue,

(3) or to render maximum of public service, through railways irrespective of profits.

For the present, and until the finances of the Government are sound, the Indian Railways should be worked to earn revenue from profits; this does not, however, preclude the railways from rendering service, but this service cannot yet be rendered except at a profit to the railways.

To revert once more to the question of railway rates in view of certain statements made that the Indian public would demand non-paying rates wholesale. This is wrong—such a thing cannot be accepted—what had really been complained of in the past was unduly low rates for port traffic at one time—and further in connection with the rates making policy of the railways in the past (*viz.*, of say 1899-1905), taking whole of India together was detrimental to the interests of the Government, in some cases, owing to the individual interests of each railway being considered paramount.

Take, for instance, the case of competition that was started in 1905 to have a trial of strength between railways, at the sacrifice of Government revenue, with no eventual results in increasing railway earnings. There were similar severe and wasteful competitions in 1901-02 in Northern India, and in 1898-1900 in Southern India. If, say in 1905, the rates had been reduced to increase total traffic or to increase the revenue generally it would have been a different matter. But no, the object was to divert traffic from one railway by another and to divert it from one port to another. For instance, the wheat rates for Calcutta were brought down to the minimum on the length Cawnpur to Delhi on the E. I. Ry. and also reduced for many stations lower down, and similar reductions were also given effect to on the Oudh and Rohilkhand Railway and rates for Bombay and Kurachee also came down. These reductions did not increase the total traffic; the whole object was to divert the existing traffic from the Bombay lines and the

Bombay port to the Calcutta port. That the reduced railway rates for wheat to the ports did not and could not have affected the price, at the consuming market, of Indian wheat and thereby increased its consumption was clear from the following remarks in the report of the Enquiry of Rise of Prices in India.

“ * * * The Indian wheat is ordinarily inferior to the wheat grown in Russia, the United States, Argentine and the other great wheat-exporting countries of the world. It does not actually compete with the wheat of these countries but is required from India only to supplement deficiencies. Apart, therefore, from internal conditions affecting the supply, the exports are subject to violent fluctuations arising out of variations in the supply in other countries. In one year, the demand will be very large, and, even if the Indian harvest is abundant, prices will rise; in the following year, the foreign demand may be largely reduced owing to abundant supplies from Russia, the United States, and other exporting countries, and, even if the harvest in India be deficient, prices might fall.”

Thus the reductions were quite unnecessary from the point of view of reducing the price of Indian wheat in the consuming market for purposes of increasing supplies of Indian wheat and the reductions meant throwing away revenue.

Similarly, the rates for sugar from the ports to the interior were reduced while such traffic could easily have borne high rates (*vide* pages 229 and 230 of my Monograph on Indian Railway Rates). There was ample profit to the seller without a reduction.

Moreover, the railway rates for raw hides for export practically amounted to subsidy paid by the Indian Government to foreign manufactures, and the Imperial railway revenue was sacrificed simply to divert traffic from one port to another, and to subsidise the Hansa Line Steamer Company running from Calcutta against the Ellerman Line Steamers running from Kurachee (*vide* pages 452 to 455 of my Monograph on Indian Railway Rates). I state these facts with first hand knowledge and, at the same time, I do not disclaim

or lessen my share of the responsibility in these matters because I had a great deal to do in these respects. I freely admit that no one was more jealous of securing the best interests of and most traffic to the railway company (I worked with) than I was, but, that was part of my business as servant of the particular company, irrespective of the results to the total revenues of Indian Railways and to other companies.

If the railway companies were playing such an expensive game with shareholders' money, *i.e.*, with the money of the private individuals, who provided the funds for railways, it would not have mattered so much, but they were entering into wasteful competition with Government revenue. In such cases, a change in the policy can certainly and rightly be demanded. Further, the low import rates for sugar and raw hides were directly and admittedly opposed to the interests of the Indian sugar and leather-tanning industries.

Before I conclude my remarks on the report of the Acworth Railway Committee, I beg leave to say a few words on the question of financing of future railway construction in India.

In connection with the branch lines, the Acworth Railway Committee have very rightly observed that if development of branch railways in India is to take place through a very large number of small companies it must mean confusion, and when extensions are required in broader interests the existing smaller interests would be a great hindrance to the former. But in spite of all these difficulties both the Acworth Railway Committee and the Indian Railway Finance Committee, that was formed to consider the recommendations of the Acworth Committee on its financial aspect, gave their opinion that preferably the State should construct such lines but that if for want of funds this could not be done companies of Indian domicile should undertake such railways, and the latter alternative suggestion is already being acted upon by the Government.

In regard to branch lines, they should be confined to such ones as are purely local in their nature, and would not come in the way of real extensions to trunk lines. A broad line can always be drawn between short branches and feeders on the one side and real extensions of main lines on the other. If at all companies are to be introduced in making branches, care is necessary to be taken to see that they are real feeders and local lines and, if possible, they should be given to main lines for working, for that would be less expensive than separate management requiring separate administrative and executive staff for such branches. Then there is another feature, *viz.*, in majority of the cases such branches are managed by managing agents, instead of by Boards, through a Chairman and a Managing Director. The system of managing agents is peculiar to India. And in all cases the interests of the Railway Company and those of the managing agents may not be the same. In the first place, the managing agents get commission on the purchase of stores and materials, which, in some cases, did not include the fees for inspection, etc., carried out by the Consulting Engineers, who had to be paid separately; a commission on total value is not an inducement to reduce prices. Secondly, such managing agents may be, and are actually, also owners of or managing agents for collieries or agents of companies manufacturing railway materials. In such cases, the tendency may be for the managing agents to give preference to fuel and materials of the concerns, in which they are interested, instead of on a purely competitive basis in the best interests of the Railway. This temptation should be entirely avoided. Further, the branch lines, in fact any railway lines to be made, would require a minimum guarantee of 6 per cent. dividend for a certain number of years and 5 per cent. afterwards and in some cases this may require to be made good by the Government for some-time to come. While, however, there may be some excuse for small feeder or branch lines or light railways to be made by companies, there is no such excuse in regard to real extensions to trunk lines.

The working of railways that have already been acquired should be taken over by the State but in regard to railways, that have not yet been acquired, and in respect of which the Government do not give guarantee of interest, such as the Bengal and North Western Railway, it may not be advisable to take them over yet (*i.e.*, to acquire them under present conditions of finance). But it is most essential that the future policy of the Government in regard to new railways should be so regulated as to be most advantageous and favourable to the Government and to the country in the long run, and the past experience ought to be a very good guide in this respect.

In the near future, besides several branch lines, there are some trunk line extensions to be made, such as a railway from the coal fields in Bengal or Bihar to say Katni or Jubbulpur (*e.g.*, Daltongunge to Katni or Jubbulpur, or from Bermo to Anuppur, or from Purulia to Katni or from Gomoh to Katni) tapping also the Central India and the Central Provinces hitherto unexplored coal fields. Such railways ought, under all circumstances, to be made by the Government and not by companies of either Indian or British domicile, or even by companies that may be called purely Indian.

The main argument in favour of such big and important extensions being given to companies may be that such a procedure would relieve the Government of India Budget in the beginning.

As the late Mr. Gokhale very rightly observed, on more than one occasion, in his Budget speeches "Railways and irrigation are productive works and ought to be made out of borrowings."

We already know that a share of the National Debt of India was and is raised in England for construction of railways and irrigation works, but as far as possible the National Debt should be raised in India because India must discharge her obligations by the export of food grains, raw materials and manufactures which must mean that there would be less net gain to the country out of her exports so long as her payments

on account of obligations outside India are heavy. If there were no obligations to be discharged the full value of our exports would come to India minus only the value of imports. Therefore, as far as possible money should be raised in the country, so that India's exports would bring bigger net gains and her National Debt would benefit the sons of the country in the way of interest paid on such debts. From the Railway Board's Administration Report for 1920-21 it would appear that payment on account of interest on debt incurred by the Government on account of railways and on capital contributed by companies on State railways, was, during past few years, from 13·88 crores of rupees to 16·36 crores of rupees each year, but it is not shewn how much out of this money was paid in England and how much in India.

In any case, the National Debt should be incurred in the country as far as practicable. In the latter case the loans might be for longer periods, and then gradually paid off out of the earnings of new railways, for which loans are incurred.

Now, let us examine and see whether for trunk line extensions or even for branch lines of importance, direct loans by the Government to finance such railways or the raising of money through companies of Indian domicile is advantageous in the long run.

The recommendation that in future companies of Indian domicile should be introduced for making and managing big railways recognises, at least in theory, that money should be found for such companies in the country, although in practice it may be that a part of this money would be imported from England and invested in India as 'rupee capital.'

Now, in the case of companies, whether of Indian or of English domicile, the money will certainly, in the first instance, be found by companies, that is, not by the Government, but India having, from the very origin of railways in the country, guaranteed minimum dividends on capital it will have to do so in the future, for this is now the "dustoor," i.e., the recognised practice. That money raised on guarantee of dividend is the

most expensive system of railway financing has been recognised by economists throughout the world, but unfortunately for India, the Government have not been able to do away with it. And the rate of interest to be guaranteed in future will not be less than 6 per cent. or 5 per cent. at the lowest. The extensions to trunk lines, say for instance, from Gomoh to Katni, if allowed to be made by a company, may be required by such company to be run by itself, whereas if made by the Government it can easily be included in either the East Indian or the Bengal Nagpur Railway systems, and thus save the expense of separate administration. This will be in the right order of things because besides developing a new area such a railway will throw open a new and additional route for traffic from the existing coal fields in Bengal and Behar to the Central and Western India, but if such a line belongs to a company some portion of the traffic, on which revenue is now earned by the Government-owned railways, will be transferred to the Company and this will be a distinct loss. The Government will have to do this from the very first for making the new railway a paying one. If an Indian company can raise funds in India on Government guarantee there is no reason why such funds cannot be raised direct by the Government and thus save

(1) probably the payment of guaranteed interest for the first few years,

(2) the loss of Government revenue from diversion of traffic from existing Government lines,

(3) the payment of premium on the purchase of the railway ; and

(4) the payment of interest on annuity covering the inflated capital if purchase money is eventually paid in annuities. The Government will also run the risk of repeating the result of the past, when it was seen that under 5 p.c. guarantee there was no great incentive on the part of the railways to economise in the railway expenditure on construction or in working or to increase its revenue.

In any case, the Government will have to find funds eventually to acquire the railways in the long run, because no railway will be made without government financial assistance in the first instance in the way of gift of free land and guarantee of 6 per cent. minimum dividend and, therefore, having incurred these financial responsibilities it is natural that the Government should acquire the railway eventually. Thus, when the property is acquired debts will have to be incurred by the Government in any case, with this difference that the payment made eventually will have to be made on an inflated value in the way of premium and, further, even if annuity payment is made in redemption of purchase money interest on annuity, covering the inflated capital, will have to be paid also. Thus the total cost to, and the total financial responsibility of, the Government will be comparatively greater eventually when taken side by side with the money that will be required to be raised by the Government by direct loans. There is another point and it is this. It may be argued that with Government loans at 6% for new railways in India the money available in India for other industries and loans for improvements in and additional facilities to existing lines would be reduced. But this argument would apply with equal force to the raising of funds in India for new railways on Government guarantee. Then again natural consequences of a shorter and an alternative route must be recognised. There is the instance of the Southern Punjab Railway Company's case before us (*vide* first portion of the award of Mr. Cripps, K.C., referred to on pages 122 and 123 of my Monograph on Indian Railway Rates) but if a railway, such as discussed here (say from Gomoh to Kanti), is made by the Government and worked by the Government (say by the E. I. R.) it will add to the length of one of these railways, though not in a manner so as to render it too big for good management, and, at the same time, the extension could be freely and unreservedly used, without any fear of loss of Government revenue, for any traffic as circumstances might require and for the relief of the existing lines.

CHAPTER II

PAST MANAGEMENT OF INDIAN RAILWAYS NOT BENEFICIAL TO INDIA

The passing of the Amendment of Dr. Gour in the Assembly is a great triumph in the history of the Legislative Assembly. With the agitation that was going on in the Anglo-Indian Press and with the influence that was being brought to bear on the members to side with the Company management it was hardly expected that the defeat of the Government would be so thorough. It is a matter therefore for great satisfaction that the members of the Assembly rose to the full height of their stature in the cause of India. What the Government views would be on this question was apparent from their attitude in the past, *viz.*, before, during and after the work of the Acworth Committee. The issue of a communique by the Government Publicity Department, so shortly after Mr. Innes' visit to Calcutta, and Sir Catto's speech, about the time Mr. Hindley came to Calcutta, all went to shew that the views of the European Chamber and of the Government were very much the same. Now it remains to be seen how the Government of India and the India Office act in the matter. Will they throw aside the views of the Assembly and side with the European mercantile community of India and their friends in England or will they accept the popular Indian view. The Indian view is ridiculed, by those interested in the Company management of Indian Railways, as political, but it is hardly so. The policy of the Government of India and of the Railways in favouring export and import trade, to the detriment of the local trade and industries, by preferential rates, the most extravagant and suicidal policy of the Government in guaranteeing a rate of interest to companies, which was not earned for a long long time and is not earned even now in many cases, the payments

of premiums to companies on the purchase of railways and of so-called surplus profits, the persistent policy of keeping Indians out of higher appointments almost drove Indians to desperation. The suggestion of formation of Indian companies with half the directors Europeans, and the nomination of the Chairman by the Government will not and cannot appeal to those who have seen that the European point of view and the Government point of view on the railway question is practically identical. The Indian companies can do no better than the European companies. The only difference will be that with half the directors on the Board as Indians, with practically no powers (because if the European directors and the Government-nominated Chairman combine they will be in the majority) there is more chance of purely Indian interests being neglected, without any question being raised because the reply would be that the decision was come to by a body, amongst whom half were Indians.

It is most essential that the Indian Railways should be worked to serve Indian interests, and this can never be achieved so long as (under the garb of managing Indian railways on so-called commercial principles) preferential treatment is given to export and import trade not only in the matter of railway rates but in the matter of wagon supply. It is because of the fact that the State-worked State railways of India are run on the same lines as the company-worked State railways that even the Traffic Manager of the North Western Railway was bold enough to say in his evidence before the Acworth Railway Committee that a certain amount of preference was given to the export wheat traffic of the N. W. Railway in the matter of wagon supply. The reply to those, who argue that it is because of the company management that State management in India has been efficient, is that it is because of the principle of State railways being managed on the line of company-managed railways that the interests of India have suffered in the past, and a change in the system of management to serve the interests of the owners and of the users of the railways is very urgently needed.

But these objects can only be attained when the railways are out of the clutches of those who are not favourably inclined towards railways being managed to serve Indian interests but want to run the railways as commercial undertakings, pure and simple, in the interests of working companies. Even in the matter of management of Indian Railways as commercial undertakings they might have been such to companies but certainly not to the Govt., because it was seen that for many years, during the existence of the original companies, the railways were worked at a loss owing to (1) extravagance in construction (2) there being no incentive to economise the railway expenditure because the companies' interests were protected by the Government guarantee and this yet remains in many cases, (3) purchase of stores from monopolists who were admittedly given higher prices under equal conditions—*vide* evidence of Late Sir William Myer before the Railway Committee and (4) no attempts being made to introduce Indian scale of salaries by assisting Indianisation of the higher services. The cutting down of rates for export and import traffic by tug of war in rates between companies, entrusted with the economic working of railways belonging to the State, in the individual and very small interests of the companies in each railway, meant that the vast and valuable interests of the Government and of the people were sacrificed and money wasted. And above all, the policy of the Government of India in increasing the number of wagons without providing facilities to move the wagons, simply because the various Chambers, the Indian Mining Association and the Railway Companies asked for more wagons, caused wastage in railway expenditure and depreciation in rolling stock. All these factors can only be removed if the control of the Assembly in the matter of railway expenditure is effective.

CHAPTER III

STATE MANAGEMENT OF INDIAN STATE RAILWAYS

This question is of vital importance to the economic and industrial development of trade, commerce and industries of the country, and State Railways are eventually meant to exist for the benefit of the country and not for its exploitation. The Government of India, the old lessee companies, the European merchants and a very small number of Indians from Bengal stood in favour of Company management, whereas the bulk of Indian opinion asked for State management, and the Assembly have done right in supporting the latter opinion.

One of the directors of the railways affected immediately, the Agent of the Bengal Nagpur Railway, the Chairman of the Railway Gazette of London were all very active in India, and Sir Campbell Rhodes of the Calcutta Chamber was their principal supporter in the Assembly to advocate the cause of Company management. Sir Devaprasad Sarvadhikary and a few of his friends, who are none of them businessmen, or had anything to do with the railways except during travelling, developed into great railway experts and entered into academic discussions in support of Company management. It is particularly to be regretted that in making a comparison between Sir R. N. Mukherji and the Hon'ble Mr. Purshottamdas Thakurdas, a Bengalee writer who has suddenly developed into "a Railway man" said that it was the former alone who was wholly a businessman and could talk on railway matters and that the latter had more tinge of politics in him than of commerce. For the information of such persons it may be mentioned that Mr. Purshottamdas, besides being the senior partner of a very important firm of 53 years' standing in Bombay, which deals in cotton

and controls ginning and pressing factories in India and East Africa, is the Chairman and Director of the Bombay Cotton Exchange, Vice-Chairman and Director of Bombay Cotton Trade Association, and has been twice President of the Indian Merchants' Chamber and Bureau, Bombay; moreover he is a director of the Imperial Bank and of forty other leading commercial companies in Bombay which include railways, iron and steel works and milling companies.

The Indian businessmen, such as the men in the coal trade of Bengal and Behar or the Indian merchants and millowners of Bombay, are competent bodies amongst Indians, who can talk authoritatively on railway management in India and its effect on trade, commerce, and industries, carried on by those, who are indigenous people of the country. Both the Indian Mining Federation and the Indian Merchants' Chamber and Bureau of Bombay submitted cases of undue preference before the Railway Committee in favour of European interests in the past, and the Railway Committee had to acknowledge in a footnote in the record of evidences that the Bombay Indian Merchants' Chamber sent voluminous papers concerning cases of undue preference in favour of Europeans, but unfortunately this correspondence was not made public or printed. There was, a few years ago, a case, which was investigated by Sir T. R. Wynne, the then President of the Railway Board, personally at Cawnpur on the strong representation of the Indian mercantile community of Bombay and it had to be admitted that there were special allotments of wagons by the G. I. P. Railway to Ralli Brothers and this had to be cancelled as the result of the enquiry. The important sections of Indian commercial bodies such as the Indian Chamber of Bombay, the Indian Mining Federation, the Indian Chambers of Cawnpur, Madras, etc., can say a lot of what they know about Indian railways and they have all condemned company management. The writings of one of the very recent and hitherto unknown railway experts bear very close resemblance to the views expressed, a few months ago, by Col. Munshill of the "Railway Gazette," London, who

stated his views in a discussion with me. It is perhaps a case of great minds thinking alike.

Now to come to the points that are of vital importance to the country. In India, we have State ownership of railways but the management of railways had hitherto been that of persons, who had a very small stake in the undertakings, and their interests were in most cases not identical with the interests of the owners. And another great disadvantage has been that even the State-managed State railways were worked in the same manner as company-worked State lines.

A few points have been raised by the new railway economists. One of them is that there should be private management of State railways, irrespective of ownership, because private management is controlled—a principle almost unheard of, *i.e.*, management without ownership. Such management has been called controlled as contrasted to uncontrolled State management. It is very curious that while one set of men condemn Indian Railway State management as disastrous because there would be too much control from the Assembly there is another set, who in advocating the cause of company management, say that State management is uncontrolled.

Those, who are saying that there are possibilities of State railways being exploited to the detriment of the interests of the country, ought to look to the past history of German and Belgian railways prior to the war, and they will find that even Mr. Lloyd George had to admit plainly that those two countries were made industrially great mainly through the medium of their State railways and that this was proved by investigations made in Germany and in Belgium, on behalf of the British Parliament. And the German railways were great financial assets to that country's Government before the war although the railways were worked mainly in the interests of the economic, commercial and industrial development of that country and as a protection against foreign goods competing with German goods. Of course to-day things may be different in the matter of railway finance in Germany, for a country, which is so badly hit by war,

and is bankrupt in all respects, cannot be expected to be solvent in its State Railways. But this is certainly not the fault of the State management of the German Railways. There have been invidious comparisons drawn between our present company and State-managed Railways, without taking into account the real causes. One will find the real facts and causes fully detailed in Chapter I of this book and in pages 61 to 70 of Part I of Indian Railway Economic Lectures printed and published by the University of Calcutta.

The real cause of the Western Railways of India (not excluding the G. I. P. Railways and B. B. and C. I. Railway Company lines) having to buy Welsh coal was due to high prices and to inability of the coal-booking railways to carry coal from Bengal. Moreover, it is well-known that the sellers of coal accept a lower price when they get quick wagon supply. The cost of Indian coal was very high, including railway freight. The E. I. Railway and the B. N. Railway got coal at a cheaper price; these railways are on the spot and the coal merchants have to deal with them in their business every moment. All these factors must count. The working expenses of the G. I. P. Railway Company were very high and so were those of the N. W. State Railway for various special reasons. On the other hand, the results of the O. and R. State Railway were exceptionally good during 1920-21.

The figures of cost of working of State railways and of the company lines vary according to traffic and other conditions, and there is as much difference between two company-managed railways as between two State-managed railways. For instance, those who are practical Indian railway men know that the high cost per train mileage on the E. B. State Railway is entirely due to the very light load of jute which is its main traffic. A very large number of wagons and trains have to be run for the same weight of traffic in jute as compared with the number of wagons and trains required for the identical weight of traffic when it is coal or grain; most of this jute is sent in drums (or unpressed and merely rolled like drums).

When people talk of cost of construction being less on company lines of India they seem to exhibit utter ignorance. It is well known that the cost of railway construction in India had been exceptionally high simply owing to extravagance of the original companies. This is stated in the Imperial Gazetteer of India (Indian Empire Series).

The charging of high fares by the railways, not excluding the E. I. Railway Company, and the high cost of construction of company lines were the main causes which led to construction of railways being undertaken by direct State agencies. Pages 20 to 22 and pages 5 to 6 of Railway Board's Monograph on Indian Railway Rates will show that pressure had to be brought on the Indian railways to reduce rates and fares.

The East Indian Railway was the railway that had to be compelled by the Government to reduce fares for third class passengers (*vide* page 23 of the said Monograph). And it was also this railway that had persistently objected to the entrance of the Bengal Nagpur Railway into the Bengal coalfields and this was very clearly proved at a conference held between the Government officials and the Calcutta European merchants in Simla some 22 years ago. The report of this conference was published in a blue book called "The Entrance of the B. N. Railway into the Jheria Coal Field."

The good results of the E. I. Railway were due not to its managers but to its extensive traffic and geographical position. This was pointed out by the Government in the Imperial Gazetteer (Indian Empire Series). The Great Indian Peninsula Railway Company's results should be seen by those who are very much against the North Western State Railway results. The G. I. P. Railway Company was worked for nearly 50 years at a loss to the Government, and the Government had also to suffer loss through the Madras and the B. B. and C. I. Railways during the management by the original companies and even to-day the G. I. P. Railway working expenses are very high.

Those who have said that the fixing of minimum rates and fares is arbitrary would do well to read pages 261 to 272 of

the Railway Board's Monograph on Indian Railway Rates which will shew what would have been the loss in revenue in India had railways like the E. I. Railway and the B. N. Railway been allowed lower preferential minimum rates and fares as was asked for. It was companies' contracts that were responsible for through sliding scales of rates not being given to the Indian public over two or more railways although it was admitted that such an action would be justifiable in public interests and would mean no loss to the Government, the owner of all railways, as the rates would be paying in the aggregate (*vide* page 36 of the Monograph on Indian Railway Rates). Even inspite of rigid control of the Government of India in the matter of railway rates the Bengal Nagpur Railway Company had infringed the maximum rates (in order to prevent traffic in grain and seeds from going to Bombay port instead of coming to Calcutta) on rice, carried at owners' risk (*vide* pages 576 and 577 and pages 210 and 212 of Railway Board's Monograph on Indian Railways Rates).

Some have even gone so far as to say that the B. and N. W. Railway Company's line is an ideal railway. Such persons are recommended to travel on this line and to find out from the East Indian Railway Company what are the causes of congestions at Mokameh Ghat. There are failures on the part of the B. and N. W. Railway in supplying wagons, inspite of the fact that the State, *viz.*, the Government of India, has kept a large number of wagons on the E. B. Railway metre gauge, which helps the B. and N. W. Railway Company's line and thus reduces their capital outlay on wagons. A very full investigation on this point would be useful and it is necessary to find out whether the B. and N. W. Railway Company are not profiting at the expense of the State by not spending capital on further wagons and whether or not the supply of wagons by the E. B. Railway practically amounts to a subsidy to the B. and N. W. Railway.

CHAPTER IV

NECESSITY FOR STATE MANAGEMENT AND REFORMS IN THE ORGANISATION OF INDIAN STATE RAILWAYS AND THEIR POLICY

If the Governor General in Council and the Secretary of State accept the recommendations of the Legislative Assembly and take over the management of the East Indian Railway and the G. I. P. Railway, it will be a very important problem for consideration as to the form of management that should be adopted for the State-worked Railways, because to-day there is not much difference between State management and Company management of State railways in India.

In this connection, in order to deal with the subject thoroughly, it is necessary to examine what other countries have done in managing State railways and why there are State railways. At the outset one has to find out the reason why Italian railways have been made over for Company management because much appears to have been made of this fact. The Italian policy in respect of railways have always been unsteady and changing. They had Government railways from 1868 to 1885, then Company management from 1885 to 1905; and again State management from 1905 to 1922. And now they have for the third time introduced Company management. So Italian railways may be left out of consideration because their policy has been so changing and unsteady.

If one examines the history of the railways of the world he will at once see that as railways became older the tendency became stronger either for State management or for more and more rigid State control. Changes have taken place everywhere. Even in England the form of Company management that was in force till lately must have been found to be ineffective so as to call for amalgamations and grouping, and the

appointment of a Rates Tribunal. One need not be surprised if even in England grouping fails and nationalisation of railways is asked for. A warning somewhat to this effect came from the lips of one of the world's greatest railway men of to-day, Sir Henry Thornton, before he left the shores of England for Canada.

Whether the railways are privately owned and managed by private corporations or are State-owned and managed by the State, there is no doubt that they are parts of great public works of a country. In any case, they are quasi-public corporations and are subjected to a very detailed regulation by the State. It is held "when private property is affected with public interest it ceases to be *juris privati* only." The tendency outside the United States, not long ago, was for the Government to displace private corporations in the management of transportation agencies. The real truth lies in the fact that so long as the railways are either partially or wholly owned by private corporations and are managed by them, the individuality of interest remains and in this individuality the greater interests of the public are bound to be made secondary, even inspite of Government control and regulations, so long as the principle of each system being managed as a purely commercial concern predominates.

It is not at all wrong on principle that in the interests of the greater good of a country the State itself should perform the functions that are of a public nature instead of delegating them to private agencies as it is the duty of the State to see that the greatest possible measure of justice is secured by each citizen out of a work that is created for the benefit of a country, especially at public expense, which is the case in respect of our railways. The ideal to be aimed at is the greatest amount of good to the greatest number, and the doctrine of the Government of India at one time distinctly was that Indian railways should perform maximum of service at minimum of profit as contrasted to the policy of a private corporation, which first aims at maximum of profit at minimum of service, although it

is claimed that small profit per unit repeated several times on a larger volume of business is better than large profits per unit on a smaller amount of business. Those who hold that this policy is better attained by commercial management and competition will do well to note what the recent authorities on American railways have said in this connection. They say "the history of railways in relation with each other shows very clearly that the State cannot very safely rely upon the competition of privately owned railways with each other to regulate transportation by rail." Nowhere perhaps this was better realised than in America, but we had also somewhat similar experiences in India. I will cite one or two such instances. We saw something of this kind in Southern India in 1898. Let me quote the following from page 90 of Railway Board's Monograph on Indian Railway Rates in connection with the Southern Mahratta-G. I. P.-Madras-N. G. S. competition of 1898.

"The position was unsatisfactory from all points of view. The Government of India, through their Consulting Engineer, represented that the railways concerned should combine to prevent quoting of competitive rates either harassing to the traders or involving rates that did not pay. The Consulting Engineer, however, could do no further than record his views"

India saw something of this kind on many occasions both in Northern and in Southern India in very acute conditions, for instance, in 1905, when the whole of railways of Northern India (E. I., G. I. P., N. W. R., and B. B. and C. I. Railways) were losing money by competition. The following remarks appear on page 151 of Railway Board's Monograph on Indian Railway Rates:—

"The Railway Board in August 1905, when the representatives of all the railways were present in Simla in connection with the Indian Railway Conference, impressed on them the necessity for terminating the competition, and a special meeting was held between the representatives of the railways and the Railway Board. It was accepted between most railways that

as competition had been tried to its full length the settlement could only be made on what was termed to be competitive basis.....

It was accepted, however, that the railways were losing money by competition."

Transportation being a service of public nature, it is the duty of the Government to regulate its performance and this regulation can only be done either by State ownership of the transportation agencies or by the Government supervision of the private agencies. The greatest advantage of State ownership and State management is that the railway policy can be regulated with regard to the fiscal needs of a Government and the railways may be formed a part of the system of protecting home industries and thus helping the industrial and economic development of the country. And this is how the German and the Belgian railways were managed and are now being managed. In any transportation agency, whether fully or partially owned by private corporations, the interests of the individual investors are bound to prevail, however small those interests may be, especially when the management is left to private companies. We have already pointed out that the Indian Railways Act of 1890, which is in force even to-day, could not give that benefit to the country which the people wanted and the Government endeavoured to give, simply because of the terms and conditions of the contracts with the Railway Companies and this was plainly admitted in open Council by the then Law Member of the Government of India.

Each country has its own railway history and those who argue that politics should have nothing to do with railways will do well to note the following joint remarks of Emory Johnson, Dean of Wharton School of Finance and Commerce and Professor of Transportation and Commerce in the University of Pennsylvania, and of Van Metre of the Columbian University :—

"The political history of various nations has shaped the development of railway policy."

In England, it was private corporation that built the railways amidst all opposition from the people and with no financial aid from the Government. But there were reasons for it. The country was thickly populated and the traffic by roads, canals and sea was already big, when the railways were proposed, and there were other transportation agencies carrying this traffic. The intending investors in railways knew that they would reap a great profit and the people were not ready to part with the land required by railways, and the carriers by road and canals did not want to lose their business. The private capitalist had to pay heavily for securing charters for railways and in paying compensations. Therefore, private ownership in England has every right to demand that they should remain as long as they can. In America, too, the railways have come into existence without any financial aid from the Government and are in all respects the property of private corporations existing and working for dividends, although in America the control on behalf of the State is strict, but even such control has got to recognise the interests of the investors. It has often been held by judges and courts in England in deciding railway cases that "the railway Commissioners would consider not only the public interests but the right and the interest of the Company," even in the case of forcing traffic, originating on a particular company's system, by a longer route in order to earn better freight for that railway Company. Such a decision may be perfectly sound, fair, reasonable and equitable in a country where the railways came into existence without any Government financial assistance but such a principle would be wholly unfair for India (where originally the Government gave free land and a guarantee of 5 per cent. minimum dividend, which when not earned by the companies, was made good by heavy taxation on the people, where in purchasing the railways from original investors the Government and the people had to pay 20 to 25 per cent. premium in addition to the share value, and where the railway property to-day is mainly the property of

the Indian tax-payers). Thus the case of only small partial ownership by private corporations, managing Government railways, under Government control, cannot be good for India and is hardly as suitable as is free and unfettered State ownership and State management mainly in the interests of the people. While in England it might have been right for the judges to have held that not only the public interest but interests of the companies should be taken into account it is unfair to apply such a doctrine to India. But unfortunately this has been and is being applied. For instance, although it has been accepted for years that "tapering" scale of rates on through distances on traffic carried over two or more railways are justifiable in the interests of the public and would be paying in the aggregate (that is remunerative to the Government as owners of all railways) these through rates have not been applied, except for coal traffic and railway materials, as it was held that although the rates would be paying in the aggregate one railway company, on which the traffic originated, might get less and another railway company get more. And for this reason, the public have not got what is considered justifiable in their interests inspite of the fact that this would not mean any loss to the Government as the owner of all railways. Therefore, the very small interests of the lessee companies have prevailed over those of the public and of the Government, the greatest owner of railways, and factors like these must remain till there are companies managing State Railways, whether they are companies of Indian domicile or of English domicile, and whether their interests are small or big.

CHAPTER V

ALTERATION IN THE FORM OF STATE MANAGEMENT

The speech of Sir Campbell Rhodes at the Bengal Chamber Annual Meeting was remarkable for the fact that it ignored the decision of the Assembly, which by solid voting passed the resolution for State management of the E. I. Ry. and the G. I. P. Ry. He said that many Indians of the Assembly were in favour of company management. If this were so then (to quote the words of Rt. Hon'ble Srinivas Sastri) "the defeat of the Government on the question of the Railway Management in the Assembly would not have been so thorough as it had been." There might have been few, who shared Sir Campbell Rhodes' views, but those few do not count, for they neither represent the views of purely Indian mercantile and industrial bodies or of purely Indian mining concerns or of the Indian people largely. Had many men in the Assembly been of Sir Campbell's views the amendment of Hon'ble Mr. Innes would not have been so hopelessly lost. What the Government (through the Hon'ble Mr. Innes) and the European Chambers aimed at and are trying hard to get is a bigger company management than there is now. At one time Sir Frederick Upcott and others, when with Government of India, had formulated a scheme for the E. B. State Railway to be taken over by the Bengal and North-Western Railway Company. And this scheme of theirs has now been published in one of the appendices of the Technical paper on the Hardinge Bridge, and it is also well-known that attempts were made from time to time by the East Indian Railway Company and the Bengal Chamber of Commerce to get the working of the Oudh and Rohilkhand Railway (another State-managed State Railway)

into the hands of the East Indian Railway Company. The speech of Sir Catto on the grouping of railways bears resemblance to the Government scheme. It is, however, admitted that for purposes of economic working grouping of the O. and R. Ry. and the E. I. Ry. and the broad gauge section of the E. B. Ry. might be beneficial. But when one thinks of Mr. Innes' amendment (which was rejected by a great majority in the Assembly) asking that the door for company management should not be closed, even after the E. I. Ry. has been taken over by the Government, one is inclined to believe that at least one of the objects of grouping is to have a far wider and bigger company management than there is even now. Let the people take a warning and agitate against grouping of railways unless and until State Management of the East Indian Railway is a settled fact. I hope this warning will not go in vain. Sir Campbell Rhodes mixes up the Bureaucracy in Delhi and Simla and, what has been called by some, the democracy of the Legislative Assembly together. Hitherto, the argument has been that in democratic countries State management of railways is not suitable and a great deal was made out of this point in the speech of Sir George Godfrey at the Rotary Club. It is only right that the Bureaucracy in Delhi should be watched by the Legislative Assembly, as far as it is possible within its present scope, to make the Bureaucracy take the interests of the Indian public into consideration in the management of the railways owned mainly by the tax-payers. And when real democracy comes, and even before, it is essential to change the form of the present State management of railways in order to make them do the utmost in the interests of the country and its permanent population.

In Germany, instead of the Empire, there is now the national Government, but the ownership and management of the State Railways by the State remains intact. Why? Because the German people have realised the beneficial effects of State management for the industrial and economic development of their country.

Prince Bismarck recognised, when he made railways State-owned and State-managed in Germany, that for the "elimination of rate discriminations and for the ability of the Government to use the railways for the promotion of the industrial and economic welfare of Germany it was essential to have state ownership and state management." This object, as admitted by Mr. Lloyd George, was proved by results.

Paying public works, such as Posts and Telegraphs, are run by the State in many countries but the telegraph lines and telegraph offices are also owned and run by private corporations in others and why is not the latter fact being used as an argument by the Government and the Bengal Chamber that telegraphs should be run by private corporations as they are commercial concerns? Further, irrigation is also a commercial concern and pays the Government of India well—far better than the railways of India—but then there is no proposal from the Government and from the European Chambers to promote irrigation by private enterprise and by spending more money, out of Government revenues or by loans, than on railways.

In asking for State railways of India to be managed by companies of British or Indian domicile, the latter with half the directors Europeans, it seems that the British commercial interests are foremost in the minds of those making such proposals, whose ideas of development of India and its prosperity are the export of its raw materials and the import of foreign goods (preferably of British manufacture) and I know it for a positive fact and can say without fear of contradiction that the rates-making policy of the Railways of India was once directed towards quotation of lowest possible rates for raw products, such as grains, oilseeds, hides from the interior of the country to the ports and for the imported goods from the ports to the interior. The purely Indian commercial and industrial bodies, such as the Indian Merchants' Chamber and Bureau of Bombay, the Indian Mill-owners' Association of Bombay, the Indian Mining Federation of Bengal and Behar and the Indian merchants of Madras and the United Provinces, must

have had very sound reasons for having declared against company management. No Indian interests had such close and extensive dealings with G. I. P. Ry. as the Indian Merchants' Chamber and Bureau and Indian Mill Owners' Association of Bombay, and, similarly, the Indian Mining Federation had as extensive dealings with the E. I. Ry. and their opinions in favour of State management and against company management cannot be lightly brushed aside. The peoples' representatives in the Assembly have done their best and it remains to be seen if the Government and the Secretary of State will accept what India has been asking for from a long long time.

It is not only in Germany that there are State-owned and State-managed railways. In Belgium and Holland about half the railways are State-managed and owned. In Switzerland almost all the railways are now owned and operated by the Government. In Japan also the railways are virtually owned and operated by the State. And it cannot be said that these countries were and are not industrially great owing to State ownership and State management of Railways. Therefore, why should not we have State management of our already State-owned railways ?

In Germany the State railways have now become the property of the nation from that of the Empire, and the Railways were nationalised by law in April, 1920. The national Government created a Ministry of Transport, the head of which is a member of the Council of the President of the national Government. This Minister is given the supervision of the railway service, direction of operation, control of railway finances and powers to establish rates. The old subordinate organisations and Advisory Councils for the lines remain intact. The Divisional organisation to actually operate the railroads are separate "Directories" for several groups, each group being in charge of a President, who is responsible to the minister and the minister to the National Government. Under the President of each group there are the four main branches, *viz.*, Operating, Traffic, Engineering and Mechanical. There are separate Superintendents

of each such division on the line on assigned portions of railways. Associated with each President there are advisory councils, who represent the various interests, and the endeavour is to "prevent arbitrary action by the railway managers and to secure the considerations of the economic interests of the entire country in affecting the general policy particularly the Rates Policy." It should also be particularly noted that eminent writers on American railway problems of the present day have frankly admitted that before the war "from a financial standpoint in particular Government operation proved highly successful in Germany." The organisation in India, as soon as the G. I. P. and E. I. Railways are taken over, should have a minister in the Central Government in charge of railways, responsible to the legislature. He should be assisted by technical men and advised by a body of advisory board which should be representative of all interests. Under this ministry there should be a President for each group of railways, who should be also advised and assisted by a board consisting of representatives of various interests and the object should be to secure the considerations of the economic, industrial and social interests of the entire country in affecting the general policy of railway management. The Canadian national railways are also managed by the State, through a board of directors, of which Sir Henry Thornton is the newly appointed Chairman.

Government of India Railway Department Reorganisation.

In connection with the specific form of State management that should follow the taking over of the management of the G. I. P. Ry. and of the E. I. Ry. by the State the broad outlines have just been discussed. It has been suggested that the organisation at the head quarters of the Government of India might be something like the organisation of the ministry of Railways in Germany, headed by a minister or member of railways and communications, who should be advised by a fully representative Central Advisory Board. The details of the

Railway Department organisation in the past, and what the recommendations of the Acworth Railway Committee call for will be found in Appendix I, which was written long before this Chapter V, to show the organisation in the past and what the Acworth Committee asked for and what could be done to carry out the recommendations of the latter. But as that does not solve the problem I thought it necessary to lay before the public suggestions as to the proper form of organisation which the needs of the country really demand. They are given below :—

The idea of the Acworth Committee to have Divisional Commissioners and then not posting them to their divisions but having them all at Head Quarters (Delhi and Simla) is something unique.

When the grouping of railways comes and there are General Managers or Presidents for each group, with strong and representative Advisory Boards for each group it would be anomalous to have Commissioners between them and the Chief Commissioner and the Member in charge of communications. The Commissioners would then be like fifth wheel to a coach. With the grouping of railways and the formation of Advisory Boards for each group, and a Ministry of or membership for communications, and a Chief Commissioner for railways with a Central Advisory Board (to be also fully representative) the Divisional Commissioners would not only be superfluous but would be a hindrance to the quick disposal of work, besides meaning additional expense, for once given the name of Commissioners they would demand much higher salaries than the Commissioners of Civil Administrations, in the same way as the Chief Commissioner of railways to-day is getting a much higher salary than the Chief Commissioner of a Province got when there were such Provincial administrators.

Under the Ministry or Member there should be the Chief Commissioner of Railways, and under him Deputy Chief Commissioners, at the headquarters of the Government, in

charge of several portfolios relating to Railway Departments, with powers delegated to them by the Ministry and the Chief Commissioner, to deal with matters relating to various branches, *e.g.*, traffic, transport, mechanical, engineering and finance. The Deputy Chief Commissioners should rank with the Joint Secretaries of the Government of India, and the Chief Commissioner should correspond to the Secretary to the Government of India as he does now. The policy should be to decentralise.

With the introduction of a President or General Manager for each group of State Railways there would be no necessity for Divisional Commissioners to interfere with them, as each railway group ought to be a fully responsible body. No doubt the general railway finances and the general Railway policy, relating to the railways of India as a whole, will have to be dealt with at headquarters of the Government but these can be dealt with by the Chief Commissioner and his deputies on the lines of the policy indicated by the Ministry, the Chief Commissioner and the Advisory Council. But it is not essential that these technical Secretaries should get higher salaries than the General Managers or Presidents. The Minister for railways should also be the Minister for Communications in general such as water transport, roads, telegraphs, and post offices. The Department of Communications should be distinct and separate from commerce. If railways and commerce come under the same member what may happen is this. The tendency of the Commerce Department will be to increase export and import trade, and the export of raw materials out of India and import of manufactured goods may be unduly but unconsciously encouraged by the member; if he had both commerce and railways under his charge, by following the same method of rate-making as in the past. The Communications Department should be free to act in the interests of India as a whole and able to hold an equilibrium between the Departments of Industries and Commerce, especially as having regard to the Reports of the Fiscal and Industrial Commissions it is essential to see that the Railways do not favour foreign commerce to the detriment

of Indian industries and India's internal trade. But this can only be done if the Railway policy is not controlled by the Commerce Member.

But canals ought rightly to go to the department that deals with Revenue and Agriculture. This department of the Government in particular and the country would be very greatly benefited by more canals, in respect of which large sums are necessary to be spent both out of revenue and loans, but if canals are amalgamated with the department of Communications they would not perhaps receive that attention that they should; and funds and grants are likely to be absorbed in less beneficial works. Canals require a great deal more attention than has been paid to them in the past and the question ought to be strongly taken up by the Legislative Assembly and the Provincial Councils; and in future canals should be made deep and broad enough to be used for navigation and irrigation at the same time and the Punjab Industries Department have made a strong point of this.

The Central Government Advisory Council for Railways besides including men from the Assembly, should have persons who represent the various interests served by railways and, instead of all being nominated by the Government, majority of them should be elected by the several interests. And the same procedure ought to be followed in the Advisory Councils for each group of railways.

CHAPTER VI.

GROUPING OF RAILWAYS AND ORGANISATION OF EACH GROUP.

Amalgamations and grouping of railways are not new to India. There have been both small and big amalgamations before. The G. I. P. Railway and the Indian Midland Railway were amalgamated some 22 years ago ; the B. B. & C. I. Railway and the Rajputana Railway nearly 40 years ago, and then came the amalgamation of the Madras Railway and the South Mahratta Railway, in which latter system was also absorbed a portion of the original East Coast State Railway, which was divided between the B. N. Railway Company and the M. & S. M. Railway Company. In the past, each amalgamation (even of small lines such as the Lucknow-Sitapore and the Tirhut Railways) meant absorption of Government lines by lessee companies or extended lease of newly Government-acquired railways to original companies, but in future the policy should be reversed. Each amalgamation ought to mean management of railways by the State.

In April, 1915, I wrote about the amalgamations of the E. I. Ry., O. & R. Ry. and broad gauge section of the E. B. Ry into one group, amounting to a system of 4,800 miles in length and also amalgamation of the Assam Bengal Railway and of the metre gauge section of the E. B. S. Ry. into another system. I wrote as follows at the time :—

“ The Oudh and Rohilkhund Railway runs parallel to the East Indian Railway almost from Ghaziabad to Moghalsarai with several short branches connecting the two systems, *viz.*, at Ghaziabad, Hapur, Aligarh, Cawnpur, Allahabad and Moghalsarai. These connections will make the working of the amalgamated system all the easier. The greatest gain would be in reducing the empty running of coal wagons on the length say

Umballa, and Delhi to Dhanbad, and Umballa and Delhi to Sitarampur. Wagons going up north loaded with coal when returning empty could (to the extent required for the O and R Railway grain traffic to Bengal) be routed, on the downward journey towards Bengal, *via*, Umballa, Saharanpur, and Moghalsarai, to be back loaded with grain and seeds for Bengal, especially Calcutta.

As matters stand at present, trains of loaded O. & R. Railway wagons bring produce into Calcutta at the same time that trains of return empty coal wagons are travelling towards Bengal over the same length of the East Indian Railway. This could be avoided to a great extent by the amalgamation. Detentions at Moghalsarai which are inevitable for purposes of interchange of traffic would be avoided. A saving of even half a day to the large number of wagons, now interchanged between the O. & R. Railway and E. I. Railway at Moghalsarai every year, must mean an enormous total saving in wagon capacity. Before the Indian Midland Railway was taken over by the Great Indian Peninsula Railway there was a large amount of work at Itarsi Junction for the purpose of interchange of wagons and traffic, which ceased on the lines being amalgamated.

Similarly, if the broad gauge section of the E. B. Ry. forms part of the E. I. Ry., the entire cessation of work of interchange at Naihati could be effected, whereby "great detention to stock and dissatisfaction to the public would be saved." Naihati junction has always been a bone of contention between the E. I. Railway and the E. B. Railway and the report of the Coal Traffic Conference, held in October 1912, under the leadership of Sir Trevredyn Wynne, disclosed that there was a lack of co-operation between the traffic staff of the two railways. The public had suffered seriously in consequence and the Conference recorded in its proceedings the following conclusion :—

"That more co-operation was very advisable between the E. I. R. and the E. B. S. Railway and that each should endeavour to do its best to help the other."

It may be practicable to start and receive the Punjab and Bombay mail trains and one or two Express trains from and at Sealdah Station, for the East Indian Railway, thus obviating passengers crossing the Howrah Bridge.

The Mills on the East Indian Railway would be able to obtain the same advantage in the matter of Railway freight on jute as mills on the opposite bank of the Hughli, and in the matter of freight on gunny to the United Provinces, the position of the Mills on the E. B. S. Ry. would improve.

As regards coal traffic for the Mills on the E. B. S. Ry. all coal wagons have at present to be made over the E. B. S. Railway at Naihati, as they cannot be carried through to destination by E. I. Railway trains. Fresh trains have to be formed at Naihati to work them onwards. If the E. B. S. Railway and the E. I. Railway were worked by one administration a coal train with wagons for the Mills could start from say, Asansol or Ondal or Burdwan and run straight through Naihati and go on dropping wagons at E. B. S. Railway stations between Naihati and Calcutta, thus saving detentions to wagons to a very large extent."

While the amalgamation of the E. I. Railway with the O. & R. Railway and the merging of the E. B. Railway broad gauge section into the new system would tend to economic working, there are other important problems involved in this question.

Looking from the point of view of the Bombay and Karachi Ports and the Bombay and Karachi merchants, and the local producers and local merchants it is to be borne in mind that a great bulk of the traffic in produce from Rohilkhand and places west of Benares finds its way to Karachi and Bombay and the tendency is for more and more traffic to go west and this was the main reason for the proposal to build a railway on broad gauge from Cawnpore to Karachi as it was admitted that the influence of Karachi Port was extending eastwards in U. P. Thus Karachi and Bombay would have strong objections to the whole of the O. & R. Railway going to E. I. Railway.

If I remember correctly at one time (some 11 or 12 years ago) the idea was that in order to effect a compromise with the interests of the Bombay and Karachi lines and of those two ports the distribution of Railways might be on the following basis :—

(i) The E. I. Railway, Howrah to Delhi, including branches (except the Jubbulpore line), the O. & R. Railway from Moghalsarai to Bareilly and the E. B. Railway broad gauge to be formed into one system.

(ii) The G. I. P. Railway (as it stands to-day), the Jubbulpore-Naini section of the E. I. Railway, the Bareilly-Moradabad, the Moradabad-Ghaziabad, and the Bareilly-Aligarh section of the O. & R. Railway to be formed into another system. It is also reasonable that the Aligarh-Muttra Railway, when and if built, should be made over to this system. (In the meanwhile, this system should have running powers over the Ghaziabad-Delhi section of the E. I. Railway and also over the Aligarh-Agra section of the E. I. Railway. The cost of doubling the line between Aligarh and Agra, with two bridges over the Jumna already existing in Agra, should be compared with that of building the Aligarh-Muttra Railway involving with it the cost of building of another bridge over the Jumna.) The Cawnpore-Gangapore Railway should, when built, also form part of the G. I. P. group because it would pass through a tract of the country already coming within the sphere of the G. I. P. Ry.

Along with the efficiency and economy of working each group of Railways, the economic and industrial development of the country should be considered. In fact, the latter ought to be the main object of grouping, as the State Railways were made for the benefit of the country and not for the sole purpose of being run economically and efficiently as railways only. Therefore from this point of view it is best to let the traffic take its natural course, instead of being artificially diverted. If the railways are grouped as above, the interests of Bombay, Calcutta, Karachi and particularly of the local tracts would be best and fairly served, provided through trains, through scales of sliding rates to all places applying on through distances over all State

Railways, are allowed, and running powers where necessary, are granted and continued.

(iii) Until the contract of the A. B. Ry. expires the metre gauge section of the E. B. Ry. would have to be treated as a separate system. There being already a separate Divisional Superintendent (or say a Dy. Traffic Manager) for the metre gauge section of the E. B. Ry. and with a separate Dy. Chief Engineer, Engineer and Loco Officers, and with already a Loco and Carriage workshop for the metre gauge section existing, this separation can easily be attained and the metre gauge cheaply run as a separate unit under a manager with head-quarters at say Saidpur. Then there may be a responsible Divisional Superintendent, say, at Goalundo, for the East Bengal or Dacca group of metre gauge railways (so that the latter would be more easily accessible both to the Calcutta and Chittagong merchants and to the Assam Bengal Railway) and a Traffic Agent or Commercial Dy. Traffic Manager of the Northern Bengal and East Bengal group of metre gauge railways might be posted to Calcutta as well.

(iv) The D. U. K. Ry. and the Moradabad Saharanpore section of the O. & R. Ry. should be made over to the N. W. Ry. as the traffic of these sections are to and from the N. W. Ry. mostly.

Grouping of railways would become most easy with one ownership such as would be the case under the State ownership of Indian Railways.

In dealing with the grouping it should be borne in mind that there would be savings in the administrative appointments of 2 Rys. out of 3 such as those of

(i) Agents and Deputy Agents of Railways.

(ii) Chief Auditors and Deputy Chief Auditors.

(iii) Chief Engineers but not probably in all the Deputy Chief Engineers.

(iv) Locomotive Superintendents and some of the Deputies.

(v) General Traffic Managers, Chief Rates Managers and Chief Superintendents of Transportation.

(vi) Chief Superintendents of Stores.

(vii) Secretaries, personal assistants, chief clerks, etc.

For instance, now there are three sets of such men on the E. I. Ry., E. B. Railway and the O. and R. Railway, but with amalgamation only one set of such high officials and secretaries will be required, perhaps with a few more Deputies than there are now for one set only. With the grouping of Railways in England, a large number of General Managers, Superintendents of Lines, Goods Managers, Chief Engineers and Chief Accountants have been done away with. There will also be savings in the offices, where a lot of duplicate work now existing between railways will be avoided, particularly in the Traffic Audit Office and in the Commercial Manager's Office. It is the imperative duty of the members of the Legislative Assembly to impress on the Government that in effecting grouping of railways a number of Indian officers and upper subordinates should not be done away with. It should be particularly noted that the process of Indianisation in such grades having been started only recently the number of such Indian Officials and Upper Subordinates is small. The percentage of Indian Officers is insignificant when it ought to be at least fifty in the near future. Colonel Sir Waghorn, late President of the Railway Board, remarked in the Assembly, in replying to Mr. Ahmed, that the reason why there were no Indian Officers in the administrative grades was that they were yet juniors in the service, but he added that such officers would in time come to the administrative grades. But this can never take place if in effecting grouping such junior Indian Officials are sacrificed to make room for the more highly or equally paid European officers. And also it is essential to see that the Upper Subordinate appointments, such as those of P. W. Inspectors, etc., etc., that are now held by Indians on State Railways, though on a small scale, are not absorbed by non-Indians, owing to the amalgamations of say the E. I. Ry. with State Railways. The danger is that if the chief officials, under the proposed grouping are company line officials they would naturally like to introduce company line policy, to which they are accustomed, on the State-managed Railways also.

Whether, after grouping of railways has been effected, the organisation under the President or General Manager of each group should be departmental or divisional is a matter that should be left for consideration after the grouping has actually taken place. The system of organisation that has hitherto been in force in India (the details of which will be found in the Appendix to this Pamphlet) has been departmental and sectional, *i. e.*, under the Agent of each railway there are departmental chiefs, for Traffic Engineering, Locomotive, Carriage, etc., and under each of them there are District Superintendents for given sections of line for each such department.

The Divisional system had its origin in America where, under General Manager of each group of railways, there is the General Superintendent of operation responsible for carriage of goods and passengers and for all arrangements connected therewith. There is a separate Traffic Manager for fixing rates, dealing with claims for loss or damages to goods and booking and delivery of traffic, a separate Chief Engineer of construction and Mechanical Engineer in charge of big workshops, and a Chief Accountant.

Under the General Superintendent of operation (or transportation) there are district Superintendents, who have under them complete organisation for each district that is the district Transportation head (under the General Superintendent and the General Manager) is in charge of all operations of his division including maintenance of track, telegraph lines, stations, yards, upkeep and maintenance of locomotives, carriages and wagons while running, and control of all staff connected with the working of traffic and trains.

In fact, he is the one head on his district, under whom the work of all departments connected with operation of traffic are placed, so that it is claimed that there is more co-operation and unity, resulting in better economical management and speedy movement of traffic. This system of organisation is not only new to India but also new to England. With heavy and concentrated traffic such as there is on English and American Railways, this system might prove or might have proved successful, but it remains to be

seen what better results are attained in India under this system, which has so far been introduced on the G. I. P. Ry. only. And by the time the grouping of railways is an accomplished fact the G. I. P. Ry. divisional system would have had a fair trial, and the result would thus be a guide as to whether this system should be adopted on a large scale or only on the busiest sections of the lines with departmental and the sectional system on the less busy lines. But above all, before either grouping or anything else takes place the State management of State-owned railways should be an accomplished fact.

CHAPTER VII.

TRAFFIC AND TRAIN CONTROL.

In India, with the constantly increasing traffic and the difficulties that are found in providing facilities to move the traffic, the important railways, or rather the trunk lines, are introducing, or have introduced, a system which is known as "Train and Traffic Control." Up to now, however, excepting G. I. P. Ry., this control is confined to movements of trains only.

On the G. I. P. Ry. the functions of this control include the formation of trains, the ordering of trains and engines, the regulations of train and traffic movements, the control and movements of wagons, etc. The object of introducing train and traffic control is to secure a greater facility for movement of traffic, wagons and trains, to avoid wastage in the capacity of a railway and of its wagons and engine power. It is claimed that if the train and traffic control over each railway is properly carried out, detentions to wagons and trains, and wastage in the capacity of the lines and of wagons, and wastage of engine power of a particular railway would be avoided, and economy in staff effected.

But to secure better results in the working of Indian railways in the matter of train, traffic and wagon movements, *taking India as a whole*, further action and co-ordination are necessary.

Looking to the fact that a large amount of traffic is interchanged between two or more railways, and as the ownership of all the lines is that of the Government, it is essential that there should be proper co-ordination and combination and combination between the several railways in the matter of train and traffic control. The distances in India are great, and consequently the leads of traffic are long; the traffic conditions vary in different seasons; the flow of traffic is not even in both directions; double and single lines follow one another and sometimes a single line is sandwiched between double lines on

both sides, and traffic from various Provinces and Districts sometimes converge, at the same time, on one point. Thus it is very questionable whether by each railway administration working for itself and doing its best in the matter of traffic and train movements *for its railway only*, will benefit India as a whole, and secure economy and efficiency in the long run. And in some cases, the benefit even to an individual railway might be greatly minimised unless and until there is a proper traffic control over Indian Railways combined with the Director of Wagon Interchange, taking at first the Northern, Western and the Bengal railways together.

Before proceeding further it would be useful to explain what is "Train Control." It is a system under which certain groups of stations or certain lengths of a line, are placed under the control of a Control office which is connected by telephone with all stations, cabins and yards of its section or sections and also by telegraph. Those stations, cabins and yard or these sections that are connected direct with the control office with telephone communications (in addition to the telegraph connections with the control office) are known as control sections, and those which are connected by telegraph only are known as supervised sections.

The train control office is generally situated at a central place and this control office is well posted in all details regarding facilities at each station and other points on its section, and the capacity to receive, hold and despatch, traffic and wagons at each station.

In England, this traffic control embraces the functions of the formation of trains, the ordering of trains and engines, the regulations of train movement, the control and movement of rolling stock, the restrictions and diversions of traffic, etc.

The controller, in charge of a control office, receives at a certain hour of the day (or twice a day at some places) generally in the evening, when day's work is finished, the following particulars from all stations on each section :—

- (i) of empty wagons on hand,
- (ii) of wagons waiting to be unloaded,

- (iii) of wagons required,
- (iv) of wagons loaded and empty, waiting to be moved by trains for 24 hours or so,
- (v) of goods waiting to be booked,
- (vi) of goods waiting to be loaded.

In addition the terminals (where engines are changed and fresh trains are formed) send the following particulars to the Control office :—

Total loaded and empty wagons received and despatched, in both up and down directions, during the previous 24 hours, and the number of loaded and empty wagons for both up and down directions, in hand at the time of sending the message,

Total engines available,

Total engines incapacitated,

Total brake vans received, despatched, or on hand during the previous 24 hours.

With the introduction of a train control office, the responsibility of station masters at changing stations in the matter of ordering goods trains, a certain portion of the responsibility of the District Superintendents, particularly in connection with the distribution of the rolling stock, as well as some of the responsibilities of the yard masters, are reduced. In time the Locomotive Foremen will also, to a great measure, be relieved of a portion of the work, *e.g.*, regulating movements of engines, etc. Therefore, in addition to there being expedition in the matter of traffic and train movements, there ought to be reduction in staff—in highly paid European station masters, yard masters, etc. Persons holding such posts will not then be required to use that discretion and to undertake that responsibility which they have to do now.

But the system of train and traffic control of each individual railway system, such as above described, cannot go very far in the matter of expediting the despatch of traffic over long distances unless there was, over and above such a system of each railway, a much wider co-ordination and combination in the

matter of traffic control of several groups of railways taken together, comprising for instance, the whole of the railway of Northern and Western India and West Bengal. Further, such control should be under the Director of Wagon Interchange, and work in close touch with the train control of each individual system.

Now, it may be asked why such an extended general traffic control is necessary in India, over and above the train and traffic control of each railway in order to make the latter successful, when on English railways the organisation of each railway has been found to be sufficient, without there being the necessity for a traffic control of the nature suggested herein. In India, the traffic is for long distances, and no small amount of traffic passes over two or more railways of long lengths each, and even with the grouping of railways this factor will remain to a large extent. As a contrast to this, the railways in England deal with concentrated traffic comprised within small areas. Therefore, each Central Control office of several railways in England is able to control a large amount of concentrated traffic and trains. Then again, owing to nearness of distances, the controllers of various railways in England are able to meet one another often and almost daily, exchange messages between themselves on telephones but, in India, owing to great distances such frequent meetings cannot be conveniently arranged. For the same reason, use of telephones for exchange of messages, between controllers at distant points is also not possible in India as telephone messages do not go very far in India. Moreover, in this country because of pooling of wagons of broad gauge railways, extending over a large area, journeys for wagons take days together, both when loaded and empty. Owing to this fact and the Government ownership of railways and wagons, the position demands that there should be even distribution, and fair treatment all over India, and economy in working secured, over all railways owned by the State. To illustrate the position more clearly it will be useful to show how traffic moves in India, sometimes converging on one point, from various and different directions,

provinces and districts. For instance, while the B. N. Ry. might be sending coal to the Bombay Presidency, particularly say to Bombay (*viâ* Nagpur and Bhusaval) and to Ahmedabad (*viâ* Nagpur, Bhusaval and Amalner), the E. I. Ry. might also be sending coal from the Bengal and Behar coal fields to Bombay (*viâ* Allahabad, Jubbulpore and Bhusaval, and grain *viâ* Cawnpore, Jhansi, Itarsi and Bhusaval). Added to this grain and seeds on the G. I. P. Ry. in Central India and cotton in Berar might be awaiting despatch to Bombay to go past Bhusaval. Under the system of train and traffic control of say the E. I. Ry., the B. N. Ry. and the O. & R. Ry., working independently of and without knowledge of one another's conditions of traffic movements, it may happen that each railway may be working heaviest traffic possible from different parts of India in the direction of Bhusaval at the same time. And if anything untoward happens at Bhusaval or in its vicinity to hamper movement of traffic and trains for eight or twelve hours, then not only Bhusaval but sections on three sides of it would get congested almost immediately. And the congestion would work backwards. What would happen in such a case, without wider control in the interests of India taken as a whole, is that either the cotton traffic would at once be suspended because it is near at hand, or coal traffic might be curtailed and other traffic allowed, or perhaps all traffic stopped. Moreover, it takes time to resume booking after restrictions are placed, and sometimes the restrictions take effect when the cause is removed. But with a Chief Traffic Controller, with Divisional Controllers under him working at different places in India, he would at once know when the block is likely to be removed and knowing the most recent position of traffic, trains and yards, of all parts of Northern and Western India, he will be able to stop and stable trains at convenient places. He would then stop such traffic only, and in such quantities, or for such a time, as circumstances might require. With full and up-to-date facts and figures before him he will be able to use much better

discretion than a man on one railway conversant only with the conditions of that railway alone. Further the movements of empty wagons from the opposite direction may also be checked in consequence of such a block, specially as most part of the lines in India are on single track, and suppose there is congestion on the E. I. Railway between Jubbulpore and Naini or at Moghulsarai, the Director of Wagon Interchange, with the Chief Controller of traffic, working at his elbow, might divert wagons for the Coal Districts from Bhusaval to the Nagpore route over the B. N. Railway and from say Itarsi to the B. N. Railway route *via* Katni. The Chief Controller should be at Allahabad and his Divisional Controllers may be at places like Dhanbad, Nagpur, Moghulsarai, Cawnpore, Jhansi, Lucknow, Itarsi, Nagda, Bhusaval, Bombay, Delhi, Agra, Lahore, Samsata, Karachee.

I gave this matter very careful and serious consideration during 1917 and 1918, and in February 1918 I suggested a somewhat similar system of control to deal with the abnormal war traffic at the time, but unfortunately the then President of the Railway Board fearing that such a control would amount to interference with the Agents of the company lines did not take action at the time (*i.e.* February 1918).

The following extracts from pages 109 and 110 of my Pamphlet on "Main Features of Goods Traffic Transportation on Indian Railways," published in 1918, will show clearly the scope and the nature of the control that I had suggested and the object it was intended to achieve :—

"Para. 149. (i) It may be money well spent if there is appointed a Chief Traffic Controller, with divisional traffic controllers at various centres who will, in the first place, determine the maximum capacity of the various routes used in the movement of the important traffic and maintain a record of all trains and wagon movements with a view to checking whether the capacity has been fully utilised, and if not, to examine the causes ;

(ii) to consider from time to time the best means of increasing the capacity

- (iii) to keep railways fully advised of the position on other connected systems and give timely intimation of probable difficulties likely to arise and advise them as to diversion and redistribution of traffic;
- (iv) to maintain a record of traffic and wagon requirements on the various systems for the purposes of the traffic control;
- (v) to obtain and check periodical statistics of operation of several systems including
 - (a) the number of trains over each section, and in and out of each terminal, marshalling or junction stations,
 - (b) the number of wagons per train,
 - (c) the average load of loaded wagons,
 - (d) train and wagon miles per engine hour,
 - (e) stock detained at terminal, junction and marshalling yards,
 - (f) engines and wagons under repair or out of use;
- (vi) to examine in communication with railways the effect of adjustment of rates, and agreement for the division and routing of traffic, running powers, etc., in relation to the transportation capacity of the various routes, sections and junctions;
- (vii) to determine where revision of existing arrangement can be made in order to utilise more economically the capacity available or increase the capacity."

"Para. 139. When it is seen that a great deal of traffic is through traffic and detentions occur at points beyond junctions with foreign lines, a through time table for such through trains over more than one railway (say from the coalfields of Bengal or Moghal-sarai to Lahore, Karachi, Bombay, or say from Cawnpore, Agra, Delhi, to Karachi and Bombay) are needed, and the staff on all the lines to be instructed to push such through trains. Somewhat similar action in regard to through trains for empties returning for coal loading is also necessary.

"Para. 140. Then a co-operation and exchange of information between junction and changing stations particularly in the direction in which movement of traffic is heavy appears to be essential in times of pressure."

“ Each centre or junction ought to know the exact position or something near accurate position and the difficulties of each other, so that a forward junction might be able to tell a junction behind what difficulties the former encounters in dealing with trains from the latter and then it may be considered what action can be taken to improve matters.”

While it is admitted that the traffic and train control of each individual railway will attain beneficial results in connection with the clearance of the local traffic in expediting despatch of wagons and train of each system up to junctions and in reducing wastage of train and wagon capacity and engine power to a certain extent, it is certain that far reaching results will not be attained, taking the traffic and the economic improvement of India as a whole, unless there is wide-spread combination and co-ordination and train control comes on contiguous busy railways at one time. For instance, even in the matter of clearing of local traffic of a railway it has to be remembered that the broad gauge wagons of Indian railways are pooled, and therefore, unless movements of both loaded and empty wagons for long distances and through traffic over several railways, working in conjunction with one another, are expedited, there would be wagon shortage on individual railways, and consequently there would be difficulties in the matter of supply of wagons even for local traffic. Further, it is of little use, one railway working to a junction a large number of trains and wagons, owing to such railway possessing the advantages of double line for a long length more powerful engines, level road, and consequently being able to work big train loads at a greater speed, if at the junction with the next railway, that railway owing to grades, or single line, or both, or limited loads for its trains and lesser speed, is not able to clear the traffic arriving at the junction as fast as it is brought in.

In this connection I would invite attention to pages 68 to 74 and 75 to 82 of my recent publication “Indian Railway Economics (Transportation series), Part II” published by the Calcutta University.

There is another serious factor, which will show how the E. I. Railway Company and the B. N. Railway Company have in the past profits at the expense of other railways and all other parts of India: *vide* pages 85, 86, 87 and 88 of Part II of Indian Railways Economics (Transport series), published by the Calcutta University, extracts from which are given below :—

“It will be seen that, excepting in the case of the E. I. R. and the B. N. Railways, more traffic was cleared by other railways before general pooling of wagons.”

“Comparing the results of 1920-21 with those of 1916-17 the E. I. R. and the B. N. R. between them carried an excess traffic of 15 lacs of tons, and it is remarkable that each railway accounted for an equal quantity to make up 15 lacs, *viz.* 7½ lacs of tons each. At first sight, one would be inclined to think that this increase was mostly accounted for by coal traffic, but this does not appear to be so. Whereas the total excess traffic of the E. I. R. in 1920-21 (compared with 1916-17) was 7½ lacs of tons, coal only accounted for an increase of 1,73,000 tons (less than 2 lacs) and, in the case of B. N. Railway out of 7½ lacs of tons the increase in coal was but 96,000 tons (or less than one lac).”

“The figures show while the railways like G. I. P., B. B. & C. I., O. & R. or the N. W. Railway carried less traffic than before general pooling was introduced the E. I. Railway and the B. N. Railway carried much more general merchandise traffic, or in other words restricted general merchandise traffic was carried on railways, other than the E. I. Railway and the B. N. Railway with a view to give assistance to the two latter railways in the matter of general merchandise traffic by such other railways sending their wagons to the E. I. Railway and the B. N. Railway. But this points to the fact that such wagons were not used for the purpose intended *i.e.*, they were mostly used by the two latter lines much more for general merchandise traffic than for coal traffic. This being the position a very important question arises here. In the first place, it is to be asked whether all the railways have realised this position. Then the next issue is whether it is right that the traders and other people on railways other than the E. I. R. and the B. N. R. trading and interested in commodities other than coal, should be compelled to restrict their business largely in order that the similar traders and industrialists on the E. I. R. and the B. N. Railway should benefit by these two latter railways having freer supply of wagons at the expense of traffic and business on other railways, which have to spare their wagons for the E. I. R. and the B. N. Railway.”

CHAPTER VIII.

RAILWAY EXPENDITURE AND INDIANIZATION OF SERVICES NECESSARY TO EFFECT ECONOMIC WORKING.

The railway expenditure in India has been extravagant :—

(1) Firstly, due to original companies spending money extravagantly on construction.

(2) Secondly, due to payment of guaranteed rate of interest, which admittedly took away from the companies the incentive to economise.

(3) Thirdly, owing to reckless competition carried on by companies between themselves as they knew that if there were losses they were protected by the guaranteed dividend by the Government, the deficits in which the Indian tax-payers paid for many years. The Government of India had to interfere on many occasions to stop wasteful competition as admitted in Railway Board's Monograph on Indian Railway Rates.

(4) Fourthly, owing to payment of surplus profits to companies before sufficient money was provided, out of revenue, for heavy repairs, renewals, etc.

(5) Fifthly, owing to monopoly of higher appointments, both in the superior and the upper subordinate grades, by Europeans, State railways had at one time started Indianization. Lord Lawrence's Government asked for State Railways in order to give India cheaply-made railways, for instance, the R. M. R., reduced rates and fares, and Indian and thus less costly management, but Lord Ripon's Government and subsequent Governments upset this. •

(6) State railway officers were originally paid lower salaries for equal and better qualification but as Company line men were paid higher salaries the State railways had to pay more. State railway officials in the junior grades were taken on

Company lines and given comparatively higher salaries and made Agents, Chief Engineers from the ranks of State railway Executive Engineers. It must be regretted that Lord Incheape Committee omitted this point, which has been fully discussed in Chapter I. On the other hand, Lord Incheape Committee has recommended higher salaries for General Managers of Indian railways. But the members of the Assembly will do well to remember the following points in this connection :—

(a) The Indian railways do not deal with the same amount of concentrated traffic as the English railways or the American railways. Nowhere in India there are even $\frac{1}{3}$ rd the number of trains dealt with at stations as for instance the trains at Liverpool Street, Waterloo, and Euston.

(b) The Indian railway conditions are wholly different and the training of Indian officers had better be in India. In this connection it may be interesting to note that the railway engineers, the railway traffic officers, railway auditors need not be imported railway men at all. The best Traffic Managers of India had been men who never received any training on any railway but the Indian railways, such as Mr. Muirhead, Col. Huddleston, Sir William Dring, Mr. Rumboll and others, and all of them rose to the top of their profession, *viz.*, to the posts of Agents. Similar of the capable Engineers educated and trained in India, there were men like Mr. Rala Ram, Mr. Hogan, and also many others more or equally capable, and the Indian Finance Department Accounts officers can hold their own with any one trained in railway or other accounts outside India. Therefore, if the desire really is for the Indian railways to be run economically they should be really indianised, which can be done and there is no need to import men from England or to compare salaries of English railway men with the Indian railway men. Col. Huddleston remarked in writing a few years ago that so far as traffic training was concerned there was absolutely no need to train men in England and Col. Huddleston ought to know what he says. He was the General Traffic Manager on the E. I. Ry. for years and also acted as Agent of

that line. It is also to be particularly noted that men, who made their name in railway transportation during the last great war and were on the top jobs, were men like Sir Eric Geddes, Sir Philip Nash, Sir V. Murray, Sir H. Freeland, Mr. Colvin, and others who were Indian railway men and most of them had their training and experience in India. Indianisation in the higher grades and the fixing of salaries at Indian scales is most essential and the Assembly ought to take these facts seriously into consideration in voting on the railway Budget and in considering Lord Incheape's recommendations for high salaries for Indian Railway Managers.

(c) Japan is near America, and Japan has its railways but because Japan has accepted western methods of transportation it has not adopted the exorbitant scales of salaries paid to railway men in America, and this fact must be truly and particularly observed in India, especially, when it is admitted by the Lord Incheape Committee that Indian railways cannot bear high railway expenses. European staff on Indian railways not only mean very high expenditure in salaries but additional and much higher expenditure in providing costly and luxurious settlements for them. Places like Sealdah, Lilloah, Bamangachi, Asansol, Dhanbad, Kharagpur, Adra, Chakradharpur, Madhupur, Dinapur, Allahabad, Igatpuri, Lonavla, and very many other places would give ample evidence of what enormous sums had to be spent in providing quarters, institutes, etc., for Europeans. Even in the grades of upper subordinates there is monopoly of appointments by Europeans, such as in the grades of inspectors, and while Indians are deliberately kept out of these appointments it is advanced as an argument that suitable Indians are not found. For instance, take the case of the permanent way inspectors on Indian Railways, especially on company-managed State Railways. They are practically all non-Indians. For the salaries that these men are paid (without having any engineering qualifications to speak of) qualified Indian assistant engineers, who find it difficult to get employments, could be had. The salaries paid to the permanent

way inspectors say on the East Indian Railway are said to be as follows :—

Number.		Salary.
8 in the grade of	...	Rs. 525 to 600 per mensem.
61 in the grade of	...	Rs. 325 to 500 per mensem.
19 in the grade of	...	Rs. 160 to 300 per mensem.

There is hardly an Indian in these appointments.

They are not employed because these posts are reserved for Europeans and Eurasians. Qualification becomes disqualification, as for Indians, who have passed out as overseers or even as assistant Engineers, from the Indian Engineering Colleges are debarred from getting these appointments because of their nationality.

In the Carriage and Wagon Department of some railways for the same kind of work and training the European and Anglo-Indian mechanics get Rs. 160 to 400, while Indian mechanics get Rs. 50 to 205. European and Anglo-Indian apprentices get Rs. 45 to 75, Indian apprentices get Rs. 8 to 38. These figures speak for themselves.

Such instances could be multiplied.

On the E. I. Railway even Inspectors of accounts on salaries of Rs. 100 to 400 are Europeans : out of 28 or 30 only 2 or 3 are Indians.

It may be argued that the proportion of total Indian employees to Europeans is very large. But this is merely an eye wash. Indians are very large in number because they form the masses in the cooly, menial, and the lower clerical grades, *i.e.*, appointments which the Europeans and East Indians will not take. It is very true that although even on State-managed State Railways the percentage of Indians to the number of Europeans as officers and upper Subordinates is yet small there have been in the past Indian Deputy Traffic Managers and even one Indian Chief Engineer. There are some Executive Engineers and District Traffic Superintendents on State-managed Railways who are Indians, but none yet on company-worked State Railways in these capacities. We know the case of Bengal Jute Mills

owned by companies of Indian domicile and with sixty per cent. of Indian capital where there are no Indians in responsible positions. The process of Indianisation can only come in with State management and with the strong and persistent attitude of the Assembly in the matter and it is only right that Indians should take a larger share in the responsibility of the management of their railways. In the Establishment Rolls of some of the most important lines the Indian Station Masters, Indian Ticket Collectors are clearly shewn on lesser salaries.

Lastly in the matter of passenger rolling stock it is most essential that the railways instead of spending money in luxurious type of first and second class carriages, tourists' cars and restaurant cars providing English food should look to the comfort of third class passengers, which can only be done, in the first place, by providing more accommodation. The B. N. Railway have hotels for Europeans and men used to European food and habits, at Ranchi and they are, it is said, opening another at Puri for the same class of people. And their catering department not very long ago, it is said, was worked at a heavy loss. Detailed investigations into these cases are necessary and the Assembly should demand this. It is essential that the Assembly should call upon the Government to render an account, showing what money has been spent during the last three years, and is going to be spent during the next two or three years, on the upper and lower classes of rolling stock separately, also of the money spent on Railway officers' saloons such as those in use of the Agents and other high officials on Indian railways and on tourist and restaurant cars. It is well-known that the third class comprises by far the largest majority of the Indian railway passenger traffic. Horace Bell in his book on railway policy in India remarked it would pay the Indian railways to pay premiums to the upper class passengers and ask them to stay away so that accommodation on trains could be more advantageously used for paying third class passengers. In the Budget for 1922-23 thirty Lakhs were provided for upper class traffic (which is but 5 to 7 per cent. of the passenger traffic and

is non-paying) and it is therefore essential that at least 6 to 8 times this sum should be spent on paying third class traffic. Recently the E. I. Railway has put on excellent first class carriages on mails but what about the poor third class passengers. Even during 1920-21 the third class passenger traffic on the E. I., B. B. & C. I., B. N., and G. I. P. Railways accounted for more than 85 per cent. of the total passenger traffic. The Assembly should at least ask the Railway Board to shew what amounts are going to be spent during 1922-23 and 1923-24 on the E. I., the G. I. P., the B. B. & C. I. the B. N., M. S. M. and S. I. Railways and also spent during 1920-21 and 1921-22 for renewing

(a) Coaching vehicles (first and second) and tourist and restaurant cars ;

(b) Coaching vehicles (intermediate) ;

(c) Coaching vehicles (third) ;

(d) Covered wagons and open wagons ;

(e) Engines ;

and how much of the amounts under each head are to be or were, devoted to "Revenue" and how much to "Capital" and on what basis. These figures must be available from railways.

CHAPTER IX

INDIANS ON COMPANY-WORKED STATE LINES

With reference to Mr. Hindley's remarks in the Assembly, that steps were being taken to Indianise the railway services, it will be interesting to point out that the following is the state of affairs on the Railway from which Mr. Hindley comes, and steps are first and foremost required on the E. I. and also the G. I. P. Railways.

The Indian Railways worked by companies including the East Indian Railway and the Great Indian Peninsula Railway, have a very large number of Europeans and Anglo-Indians in the upper subordinate appointments, which can be held by Indians. For instance, on the East Indian Ry. even goods clerks of important stations, such as, Allahabad, Cawnpore, Delhi, etc., are Europeans. The North Western Railway deals with a big traffic at Delhi and there had been an Indian goods clerk, but the East Indian Railway for similar work at Delhi all along employed a European or an Anglo-Indian not only as goods clerk but even as assistant goods clerk also. For years, while the O. & R. Railway goods clerk at Cawnpore (who at one time dealt with both the O. & R. Railway and the G. I. P. Railway traffic) was an Indian, similar post in the E. I. Railway goods shed at Cawnpore was always held by a European or an Anglo-Indian, and also now on the Great Indian Peninsula Railway at Cawnpore.

Similarly, the persons holding the posts of goods accountants and the goods clerks in the E. I. Railway goods sheds at Howrah, on salaries of Rs. 430 to Rs. 530, and on Rs. 320 to Rs. 400 respectively, are either Europeans or East Indians and even the shed Foremen on Rs. 180 to Rs. 300 are non-Indians.

In the Parcels office at Howrah the head clerk is a European on a salary of Rs. 355 to Rs. 475 and the post of chief Accounts

clerk in the Booking offices at Howrah is also held by a European on Rs. 300 to Rs. 400.

It will be thus seen that even the higher clerical and accounts appointments on the East Indian Railway Company-managed State line are reserved for Europeans and Anglo-Indians. Now as to first and second class station masters, the following appointments, say on Howrah Traffic District of the E. I. Railway, are all held by Europeans :—

	Rs. each.
Station Superintendent, Howrah ...	600 „
2 Deputy Station superintendents, Howrah ...	457 „
Station masters, Bandel and Burdwan ...	530 „
Station masters, Lillooah and Sheoraphuli ...	350 „
Cabin masters, Howrah cabin and Howrah Junction Cabin ...	400 „
10 Assistant Station masters, Burdwan and Howrah ...	350 „
6 Assistant Yard masters, Howrah and Bandel ...	350 „

The Howrah District is being quoted only as an illustration. Similar instances are at all places of any importance on the E. I. and G. I. P. and other company-worked Railways. Not one such appointment is intended for Indians and has ever been given to an Indian on the E. I. Railway. But on State railways Indians are at any rate given such appointments although their number is small. This will be shewn presently.

In the Audit Department of the East Indian Railway even the Travelling Inspectors of station accounts on salaries of Rs. 75 to Rs. 550 are almost all Europeans, and of nearly 28 such appointments only 3 are held by Indians. On State Railways Travelling Inspectors of station accounts are Indians.

As already pointed out in one of my previous articles, on the East Indian Railway of the 68 Permanent Way Inspectors on salaries of Rs. 325 to Rs. 600, of the 21 Assistant Permanent Way Inspectors on salaries of Rs. 160 to Rs. 300, and 8 Probationary P. W. Inspectors on Rs. 50 to Rs. 110, not one is an Indian. This is the case on the East Indian Railway. But on

the North Western State Railway there are no less than 30 Indians holding appointments of Permanent Way Inspectors, two of whom are Bengalees, who, however, if they come to Bengal would not get such an appointment on the East Indian Railway because they were Indians. Of course even on State Railways the number of Indians is small.

As just remarked above, station masters and assistant station masters at important stations on the East Indian Railway are all Europeans and Anglo-Indians, and the highest salary which an Indian station master can ever get on the E. I. Railway is Rs. 170, and again the number of men drawing Rs. 170 is very small, but there are Indian station masters, assistant station masters on State Railways, say on the North Western Railway, drawing Rs. 260 to Rs. 320 and there is even a Bengalee, one Mr. Mitra, on Rs. 280 as assistant station master on the North Western Railway at a big station, but this Mr. Mitra could never expect to get such an appointment on the E. I. Railway. Such cases as these should be noted by those who say that it is the policy of the East Indian Railway Company to engage Indians in highly paid posts.

The workers in the Retrenchment Committees of several Railways will perhaps recommend the abolition of the posts of a large number of Indian Brakesmen, Indian Engine Jamadars, Indian signal men etc., but what should be done also is to Indianise the upper subordinate posts and to give Indians $\frac{4}{5}$ ths of the present salaries drawn by Europeans and to see as well what such highly-paid staff can be done away with. At some interlocked stations the posts of Indian cabin assistants may be asked to be replaced by men of menial class, who do not understand English and the safety of the public may perhaps be endangered thereby on the ground of retrenchment on account of educated Indians being replaced by the non-educated. •

Now the East Indian Railway are introducing and have introduced train control, which will mean that some portion of the responsibility of the European supervising station masters, and the European station masters at changing stations and of

European assistant station masters in cabins and also in yards (when yards come under traffic and train control), who controlled trains, is going to be reduced ; on the G. I. P. Railway traffic and train control have been introduced but there is an enormous rise in expenditure and what steps therefore are going to be taken to reduce expenses both on the E. I. R. and the G. I. P. R. in the supervising staff (both subordinate and upper subordinate) as the work of District officers, station masters and assistant station masters at big stations is going to be considerably reduced with train and traffic control fully introduced as described in Part II of my recent publication "Indian Railway Economics, Transportation Series," pages 68 to 74 and 75 to 91.

Now at Asansol, there are 8 European ticket collectors on salaries of Rs. 70 to Rs. 120. For the same work at the same station the Indians can only get Rs. 40 to Rs. 90. And in spite of all that is pointed out above it is this East Indian Railway that claims that it wants to employ Indians in the higher grades as far as possible. When Sir Frederick Upcott came to the East Indian Railway as Chairman of the Board of Directors he said that the contract of the E. I. R. was soon to expire and that therefore he had started appointing Indians in the higher grades and he also remarked, when he came out to India along with the Inchcape Committee and was staying at Lillooah, that he wanted to bring the Legislative Council to his side but even to-day although some eleven years have elapsed since he started appointing Indians there is yet not a single Indian as District Traffic Superintendent or as District Engineer on the E. I. R., and probably the reason for the existence of a few Indian Assistant Traffic Superintendents and Assistant Engineers is to show to the public that there are Indians on the E. I. R., but these assistants are nowhere, as neither the executive posts of District officers nor of the upper subordinate semi-executive officers, such as those of supervising station masters (or assistant station masters at big stations) or of transportation inspectors are held by Indians. A statement shewing the number of Indians employed on the E. I.

Railway and the G. I. P. Railway in posts where emoluments are Rs. 250 and over compared with the number of Europeans and Anglo-Indians on above Rs. 250 will at once show that in the upper subordinate and the superior grade Indians are but a drop in the ocean.

A special point appears to have been made not to employ Indians in the Electric Department of the E. I. Railway. Neither the Electric Engineers nor the Inspectors nor the Power-station Superintendents nor Foremen nor Electricians nor Electric fitters (barring only five or six assistant Electric fitters) are Indians. The chief of so big an electric concern as that attached to Tata's Iron and Steel works at Jamshedpur is an Indian, and there are several electricians and electric fitters under him who are also Indians. But on the East Indian Railway it appears that Indians do not find a place even amongst the "bound" apprentices. There are said to be about 13 such apprentices now on the E. I. Railway in the Electrical Department and how is it that such apprentices are not Indians ?

CHAPTER X.

STORES PURCHASES AND MANUFACTURE, AND SURPLUSES.

In my first book, "Indian Railways and Indian Trade" (1911) I laid great stress on the point that it was essential to see that the stores were correctly and economically intended for and that with a view to avoid that stores, yet unused, becoming obsolete, after remaining in the depots for some months or years, it was essential that independent Government store verifiers should examine the stores supply and stores stock and report on them because it was essential to see

(a) whether there was a large accumulation of stores,

(b) if so, what those stores consisted of and for what purpose they were ordered and why not yet used,

(c) whether or not the large balances are the outcome of incorrect indenting of stores by the various departments.

I am sure what I asked for 12 years ago would be asked for by any economic Committee if they know what actually happens and is necessary.

The Railways issue, at least used to issue, reports of store balances and the reports of each railway for the last ten years at least should be placed in the library of the Legislative Assembly.

Then in connection with the manufacture of locomotives in India I was told not long ago that a subsidiary company to Tata's was proposed to be started at Jamshedpur, which would manufacture parts and materials in India. If this were so, such a proposal should be encouraged in all respects. At the same time I also heard that the late General Traffic Manager of the E. I. Railway, Col. Sheridan, who lately resigned, was back in India on behalf of a great firm in England—

Sir Armstrong and Whitworth. The idea, so far as I understood, of this firm was to first open a branch in India with a view to introduce their materials in this country on a large scale, *i. e.*, to obtain the sale of materials manufactured in England as more purchases may be made in India than in England, in future. If this firm establishes a branch in India, and imports parts of engines, etc., and assembles them together that will not be any better than at present. The Indian Railway workshops do this kind of work and they must be encouraged to extend their scope in preference to a foreign company coming out here to do this work for us and making greater profit than at present. But if any one really wants to manufacture engine parts in India even on a small scale in the beginning this should be encouraged under all circumstances, even at some loss at the outset because until this is done the railway unit in India will not be complete. Moreover, manufacture of engine parts in India will also mean training engine builders in this country but the establishment of a branch of Sir Armstrong and Whitworth will mean nothing.

Then, again, when the question came up in the Assembly the other day as to the purchase of stores in India on a large scale an argument was put forward that it was not consistent with the ideas of reducing expenditure, that is to say that if stores were purchased in India the cost would be higher. There would be some sense in this argument if this is the real spirit and is carried out even when the British goods and the Continental goods are concerned side by side and orders are given on a competitive basis. It may be that the placing of orders for wagons with Messrs. Burn and Co. or the Indian Standard Wagon Company means more money. And if these firms are yet largely importing parts and fittings and then putting them together in India, it is not wise to sacrifice large sums to subsidise such firms until they manufacture the essential parts in India and undertake to train a very large number of Indians; at present they do not take Indian apprentices largely. Such firms should not have and must

not have any help unless they are manufacturing and building in India and training Indians. But I understand in the case of English firms, such as those of Armstrong and Whitworth, the difficulty at present perhaps is that their prices are higher than those of the Continental manufacturers. It is to be hoped that in ordering goods from England the Continental manufacturers would be given preference if their prices are better. The High Commissioner for India is expected to observe this principle so far as State-managed State Railways are concerned. But in the case of the company-managed State lines the Directors of the companies in England place the orders. What check is and is going to be exercised over the orders that the Directors place? It is not the companies' money that is spent in buying stores and materials for the company-managed State Railways, but as it is Indian tax-payers' money it is the imperative duty of the members of the Assembly to see that such stores are purchased to the best advantage of India and that the purchases for Company-worked State Railways are also controlled by the High Commissioner for India.

In dealing with surplus profits one salient feature has been omitted. The Assembly should insist that as the Companies do not put in further capital, which is all found by the Government, there should be some stop put to the companies' sharing in future profits over and above that shared on the basis of the present capital. It is the Indian tax-payers who find all the further capital, loans and debentures for betterments, renewals and additions, and yet the companies, who do not put in a single pie, get a share of the increased earnings brought through fresh money of the tax-payers put in. The Assembly should refuse to sanction further grants until this point is settled to the advantage of the tax-payers.

It is said that under protective tariff big English manufacturing concerns, to make railway materials, machinery and locomotives, would be transferred from England to India. It is also feared that this would seriously affect pure Indian

concerns, but it is to be remembered that the key is in the hands of the Indians, at least of the Indian Govt. as the greatest consumers of the productions of such works would be the Indian State Railways. And conditions may be laid down that unless such works are owned, to the extent of at least one half the capital, by Indians and there is a strong Indian directorate on boards of such concerns, which must undertake to train Indians in every branch, with the idea to eventually get Indians to run these concerns in time, preference would be given in the matter of placing railway orders with pure Indian firms, on whom also similar conditions should be imposed. It would be a very wise thing if even loans, outside India, are incurred by the State to establish big locomotive and machinery building concerns in India and if necessary half the capital might be private (it may be $\frac{1}{4}$ Indian and $\frac{1}{4}$ English or even $\frac{1}{2}$ capital of English private enterprise); outside expert advice and money might first be imported to build factories and to train Indians. We have plenty of raw materials, but we want expert workers and capital and there is no harm in letting English firms come out if they would help in building up state owned works on a gigantic scale and agree to the above mentioned conditions. Then say, after say 20 years, when Indians have been trained and the loans repaid, the concerns, may be bought up and run by the Government. If loans can be raised it would be very much the best thing to let the state run such works to manufacture rails, Locomotives, wagons, and other railway materials as the Indian tax payers would thus save middlemen's Profits on the requirements of state railways, which will be the main stay of such works. And eventually they could be developed into ship building concerns also, and with this view some of the works may be built near or at the ports.

CHAPTER XI.

ECONOMIES ON INDIAN RAILWAYS AND STATE MANAGEMENT.

In my book entitled "Indian Railways and Indian Trade" published in 1911, I pointed out that owing to competition between the railway companies Government money was being spent in providing separate and elaborate facilities for each railway at places like Agra, Delhi and Cawnpore whereas other parts of India were suffering. I wrote to the following effect in 1911 in my first book on "Indian Railways and Indian Trade":—

"Enormous sums of money have been spent in Agra, with the opening of the A. D. C. new line in several new works, and the E. I. Railway has built a new bridge for which money was provided for by the Government. There are three lines running into Agra. *viz.*, the East Indian, the Great Indian Peninsula and the Bombay Baroda Central India. Each Railway wants to spend money in Agra, but all the three are state lines leased to different companies for purpose of working and they are, therefore, competing at the cost of public funds. Not many years ago, Agra had only three stations, *viz.*, Agra Cantonment, Agra Fort and Agra Junction—the Fort station being the main passenger station; but now the East Indian Railway has two stations, the Great Indian Peninsula Railway four stations and the Bombay Baroda Central India Railway two, and besides several works, such as loops, diversions, sidings have been constructed and there are four goods depôts. Two Railway bridges, side by side, within almost stone's throw of one another, is perhaps an unique sight in India. The needs of Agra may be great; but should Agra alone have the right to have a lien on the Govt. for such large sums when all India is crying for money for Railway facilities."

In Delhi, the B. B. C. I. Railway had their goods shed, the N. W. R. theirs, the E. I. Railway their own, although the great bulk of the traffic dealt with in the last named was O. and R. Railway goods traffic; when the G. I. P. Railway came in

(i.e., they were given the working of the A. D. C. Railway) they were again given a different goods sheds.

In the matter of joint working of goods sheds and goods yards of various places like Agra, Cawnpore and Delhi, the objections in the past were that the interests of the various companies were not the same. This is the reason why although the G. I. P. Railway and the M. S. M. Railway had a joint passenger station at Poona they both had separate goods sheds. At one time, nearly 28 years ago, it was pointed out by Sir T. R. Wynne, the then Agent of B. N. Railway, that at joint stations the Railway that employed and controlled the staff (although such staff were paid jointly by all the Railways) enjoyed the confidence of the staff, who gave the interests of their immediate masters first preference. In spite of one ownership *viz.*, that of the Government, the divergent interests of the lessee companies managing the different Government lines have accounted for the existence of separate goods sheds and goods yards of each railway at important junctions, which are at the same time important trade centres. For instance, while it was to the interest of the E. I. Railway to work the traffic from Cawnpore to Calcutta it was to the interest of the G. I. P. Railway to work the traffic to Bombay. There was very keen competition between the Calcutta, Bombay and Karachi ports and the E. I. Railway, G. I. P., B. B. C. I. and N. W. Railways for traffic to and from Cawnpore, Agra, Delhi, etc. A very great deal can be said on what was done by several Railway Companies during stages of acute competition.

The G. I. P. Railway and the O. and R. Railway goods sheds were at one time joint in Cawnpore, and they were worked by the O. & R. Railway on behalf of itself and the G. I. P. The latter Railway wanted to develop their interests in Cawnpore, and, therefore, built a separate goods sheds at Government expense. And to use the words of late Sir William Dring, the E. I. Railway wanted to "boom" Agra because he thought that the E. I. R. was not so active in Agra as it should have been, and as the other railways were. This is why the Stratchey

bridge at Agra and the E. I. Ry. Agra City goods sheds were built.

With the Government ownership and working of railways the divergent interests of the companies will disappear and then only larger economies would be possible.

Hitherto, a good deal of public revenue was wasted at competitive centres, mainly because the lessee companies wanted facilities in competition with one another. I made a strong comment on this point in my evidence before the Acworth Railway Committee. The "scrapping of the E. I. Railway goods shed" at Delhi or the amalgamation of the E. I. Railway and the G. I. P. Railway and the O. R. Railway goods sheds and goods yards in Cawnpore could only take place when there are no lessee companies urging the necessity of separate goods sheds and their separate working. The broader interests of the Government and of the country have hitherto been made subordinate to the smaller and individual interests of the individual companies.

Regarding the closing down of the various branches suggested by some at the present moment this may be considered necessary on the ground of economy and may be effected, but there is one point. It may be questioned whether the railways could legally withdraw the facilities they have provided for in the past and for a number of years, and which facilities have become a public necessity by the time they are in existence and in use.

There has been also a suggestion for the diversion of the existing broad gauge traffic via Kuchman and Hyderabad to Kurachee, which is at present carried by the broad gauge route. The main reason for the proposal for construction of the Agra-Karachi broad gauge Railway, and the conversion of the most part of the Jodhpur-Bikaner Railway on the Kuchman-Hyderabad length from metre gauge to broad gauge is that the traffic has outgrown the capacity of the metre gauge. Even in 1912, it was held that "the Jodhpur-Bikaner metre gauge was unable to deal with all the traffic

from the upper provinces, which desired to go to Karachi." This traffic was principally, from the metre gauge Railways of northern India. In 1919, it was estimated that the carrying capacity of the J. B. Railway from Kuchman to Hyderabad was only 1800 (eighteen hundred) tons a day, and it was suggested that it could at the utmost be increased up to 2,200 (two thousand and two hundred) tons a day. The weight of the traffic then passing over this Railway was up to its full carrying capacity, so it is apparent that until the new broad gauge is made the suggestion for diverting some of the broad gauge traffic from the North Western Railway to the Kuchman-Hyderabad metre gauge route, in addition to what the latter is carrying, can not be very practicable.

This chapter is in reply to one of the articles that was written by one of the ex-Agents of the E. I. Ry. in "the Statesman" on Railway economics.

CHAPTER XII.

THIRD CLASS PASSENGERS AND HIGH FARES.

Mr. Hindley, the Chief Commissioner of Railways, in speaking in the Legislative Assembly in connection with Mr. K. Ahmed's resolution on the reduction of third class passenger fares said that the question of rates and fares was entirely a matter of business with railways and it is also reported that Mr. Hindley added that the increased fares had brought increased revenue inspite of decrease in number of passengers in 1922-23 and that therefore, the public should not accept as an argument that railways might increase traffic and earnings by offering cheap fares.

It was the avowed policy of the Government of India, when the railways were begun to be built in India, that the fares should be such as would enable the largest number to travel. This policy was summed up in the following words :—

“ The people of India are now taxed to pay the guaranteed interest. For their protection the Government exercises a control with twofold object of securing such a system of good management as shall provide all the legitimate advantages of the railway communication for the country at large as well as such profits as shall release the Government from the payment of guaranteed interest. ”

Then in later years, in a Government of India Circular, (even when the railways were owned by companies but were paid a minimum guaranteed dividend), it was accepted that as railways were to be made generally useful to the mass of the Indian people, the rates for food grains and coal and fares for the lowest class of passengers should be controlled by the Government of India whereas the Local Governments might fix

maximum and minimum rates for other traffic. This was 55 years ago. Then in 1872-73 the Government of India said as follows in a despatch to the Secretary of State:—

“In India, when the Government gives a guarantee of interest, in addition to the other privileges allowed to the railway companies we are of opinion that it has a still stronger right, and is bound by a more imperative duty, to look to the interests of the people in the matter, for our belief is that a railway best serves its interests as well those of the Governments by accommodating itself to the wants of the people.”

Then again a strong argument was at one time used by the Government of India that the interests of the Government and of the companies were not the same in the matter of third class fares because it appeared while it was to the interest of the Government and of the people to see maximum of passengers carried with minimum of profit it was to the interest of the railways to carry minimum of passengers with maximum of profit, and as an instance it is pointed out that while it was to the interest of the companies to carry 2 million passengers at 3 pies it was to the interest of the Government to see 3 million of passengers carried at 2 pies so long there was a reasonable margin of profit.

It has always been held by the economists of the world, not excluding the Railway economists, that for the prosperity of a business it is the best to look for small profit per unit repeated several times on a large volume of business than to a large profit per unit on a small volume of business. Thus the accepted principle of any business is to look for a continued expansion of business and to reach the widest class of customers. This should be more so of a transportation concern, and particularly of a Government transportation concern, which has been built up with the money of the taxpayers, than of any other business concern. On this basis the argument used in justification of high fares that the increased fares have brought in a large revenue although the number of passengers has gone down becomes futile.

The following statement shows the average profit (*i.e.* the gross revenue less the working expenses) for working a passenger train one mile:—

TABLE I.

		1907		1914-15		1920-21
		Rs.	Rs.	Rs.	Rs.	Rs.
		1st. half.	2nd half.	1st. half.	2nd. half.	
B. N. Ry.	...	2.12	1.84	1.70	2.00	3.04
B. B. C. I. Ry.	...	2.13	1.36	1.51	1.68	2.32
E. I. Ry.	...	2.27	1.87	2.12	2.11	3.53
G. I. P. Ry.	...	1.24	0.62	0.39	1.16	1.95

It would have been very much better if the profit per each passenger per mile could have been given, but in the latest Railway Board's Administration Reports these figures do not appear to have been shewn, at least I could not find them. In the old reports the figures of profit for working each passenger unit used to be shown in addition to the figure of profit for working each passenger train per mile, at the same place, but I do not find them so shown on page 145 of Railway Board's Administration Report Vol. II for 20-21.

However, the figures of profit for working each coaching train one mile shows that there was a much larger profit per unit in 1920-21 on the railways mentioned above than ever before and yet the passenger fares were raised in 1922-23. Will the Railway Board publish statistics month by month of each railway passenger traffic (innumber) and earnings for each class for 1922-23 and the three previous years side by side for distances under 50 miles, 51 to 100 miles, and 101 to 150 miles, and above 150 miles, or some such figures as are readily available from each Railway's annual report of the Traffic and Audit Departments as well as figures of profit per unit mile, so as to enable the public to judge the result? Such figures are worked out (at least used to be worked out) for each railway, and as railways are public property to all intents and purposes the public should have at least the right to see and examine such figures.

The percentages of net earnings to capital outlay were as follows during the years 1907, 1914-15 and 1920-21:—

TABLE II.

	1907	1914-15	1920-21
B. N. Ry.	4.80	5.07	4.48
B. B. C. I. Ry.	9.22	6.60	6.02
E. I. Ry.	8.87	8.89	7.57
G. I. P. Ry.	7.07	4.71	3.54

It does not show that the principle of high rates and fares have been beneficial to the railways of India, thus shewing that smaller profit per unit with the prospect of expansion of business is much better than high profit per unit.

Moreover, it is to be borne in mind that in respect of the profit for working coaching train per mile the figures in Table (I) have been arrived at by deducting the working expenses from the gross earning per train mile. Seeing that the profit per passenger train unit mile was higher in 1920-21 than even before, and judging from Mr. Hindley's replies, it seems that the present policy of the Government is that the fares should be raised as far as possible so long as the earnings are more than before, although the number of passengers carried may go down, thus proving that placing railway travelling within the means of the largest number is no longer the policy of the Government of India. The future aim thus appears to be not to enlarge but to shorten the circle of travelling public. If it had only been said by Mr. Hindlay that until the railways have increased the number of carriages and there is sufficient third class accommodation any reduced fares would mean overcrowding it would have been a reasonable reply. But in this connection it may be noted that until sufficient third class coaches are provided expenditures like say Rs. 87,000 on tourist saloons on the B. N. Ry. and Rs. 37,000 and Rs. 89,000 on renewals of tourist cars on E. I. Ry. and Rs. 63,000 on betterments of tourist cars on the same line had better not been sanctioned and also money should not be spent on railway hotels for

higher class passengers used to European methods of living such as at Ranchi on the B. N. Ry. when it is known that the percentage of such passengers for whom tourist cars and hotels are maintained is very insignificant and bring no profit to railways.

Lord Inchcape Committee in dealing with railway expenditure recognised the principle that money should not be spent on non-paying lines thus proving that money should be spent for earning a good return which surely cannot be done by providing facilities for non-paying higher class traffic. Taking the year 19.0-21 the average number of passengers in a train on the B. N. Ry. were 246 and on the E. I. Ry. 248 out of which third class passengers were 225 and 222 respectively and first class passengers per train were but 5 and 7 respectively. During the month of March I had occasion to travel on the G. I. P. Ry. and noticed at one place a large number of restaurant cars, which looked quite new. These were intended for higher class passengers who used European food and it will be interesting to know what amount of money was spent on tourist cars, restaurant cars and first class and second class four wheeler carriages and bogies on betterments and renewals during 1919-20, 1920-21, 1921-22 and is going to be spent on such stock during 1923-24 on the G. I. P. Ry. and what amount were spent during the same period for third class carriages. It should be noted that on the G. I. P. Ry. too during 1920-21 out of say 230 passengers per train 211 were third class passengers and only 3 first class passengers thus showing which traffic pays the railway most. It may be said that most of the English railways also spend large sums on higher class traffic but they spend a lot on third class traffic as well. But in any case the English and American railways spend their own money, they can do whatever they like with it but on the Indian railways the money is of the tax-payers. There lies the whole difference.

It is further reported that Mr. Hindley said that the Government would watch the effect of the last increase in third class passenger fares and advise the railway administrations with a

view to reducing the fares if experience showed that they were greater than the traffic could bear. The term what the traffic could bear can be interpreted in two ways. "One way the obvious but short sighted and ineffectual way of doing this is to charge the highest possible rates and be content with the limited amount of business that can struggle to exist in such conditions.

.....The other way recognises that a small profit, many times repeated, is better than a large one obtained only occasionally, and that a large business affords greater opportunities of gain than a small and restricted one. Hence it means that a railway accommodates its charge to the circumstances of the traffic and encourages new customers and new traffic by moderate rates and liberal treatment. This is the ideal pointed to by the principle of charging what the traffic will bear."

CHAPTER XIII.

INTERMEDIATE CLASS PASSENGERS.

In reply to the suggestion that has been made in certain quarters that to introduce economy on Indian Railways it is best to do away with the Intermediate class, it is to be noted that the idea is not a new one. It originated with Col. Huddleston C. I. E., late Acting Agent and for many years General Traffic Manager of the East Indian Railway. He discussed this question with me in July 1903 at Jubbulpore when I was yet on the G. I. P. Ry. He wrote a comprehensive note on the subject in 1903, nearly 20 years ago. At that time there was no intermediate class on the G. I. P. Ry or the Indian Midland Railway, and all the Southern Indian Railways had then only three classes, viz. the first class, the second and the third class. A number of people will advocate strongly that the need for the intermediate class is imperative, and there is no doubt that the abolition of the intermediate class will mean hardship to one crore of passengers. Those Indians, who cannot afford second class travelling, and find it inconvenient to travel third class, go intermediate. In many cases to-day, the travelling power of those who travel intermediate is not greater than that of some of those who travel third class, but yet they find it necessary to travel intermediate. Many years ago, the intermediate class carriages used not to be so full as they are to-day and this is a feature which has led to more second class travelling, i. e. because of overcrowding in the intermediate classes.

According to the Railway Board's Administration Report for 1921-22 the number of various classes of passengers per train were as follows on the undermentioned railways :—

	First class	Second class	Inter. class	Third class	Total.
B. N. Ry. ...	2	5	12	229	248
B. B. and C. I. Ry. ...	3	15	19	234	271
E. B. S. Ry. ...	2	4	10	186	202
E. I. Ry. ...	3	6	15	218	242
G. I. P. Ry. ...	2	8	3	202	215

(In these figures fractions of less than $\frac{1}{2}$ have been dropped and half and very nearly half and over have been taken as one, e. g., 2.51 passengers have been taken as three passengers and 2.07 as 2 passengers, so that there is a very slight difference between these figures and those shewn in Railway Board's Administration Report).

Taking the average earnings of First class passengers per mile at between 22 and 17 pies and of Intermediate class passengers at 4 to 5 pies, each First class passenger accounted for 4 to 5 Intermediate class passengers, and barring the G. I. P. Railway, the proportion of First class passengers to Intermediate class passengers was 5 to 7 Intermediate class passengers for every First class passenger. So that if the Intermediate class is to be abolished on account of economy in working it is the First class passenger carriages that should be abolished first particularly as the cost of carrying First class passengers (in the way of providing sufficient sleeping accommodation, baths, fans, restaurant cars, waiting rooms) is much greater. But it cannot be said that it would be right to do away with First class travelling on the ground of economy in Railway working. For the same reason that First class passenger carriages should be retained the Intermediate class carriages should also be retained.

The real increase in railway earnings, with increased net profit on the whole, will come by reduction of fares for third class passengers for long distances and by providing facilities for such passengers, although I frankly admit that more third class carriages should be provided to prevent overcrowding before fares are reduced. At the same time I am confidently of opinion that reduction in third class fares for long distances will increase the Railway earnings and profits very satisfactorily.

In vol. 1 of Railway Board's Administration Report for 1921-1922 in remarking on the decrease in earnings from third class it was said that the decrease in the earnings from third class passengers was due to economy factors which prevented them

from travelling long distances. This is true but to my mind increased fares have told a great deal on the travelling capacity of third class passengers for long distances. I have always held this view, rightly or wrongly.

The following statement shows the number of third class passengers, the unit miles travelled by total third class passenger and the average distance travelled by each passenger during 1921-22 :—

Broad Gauge Rys.	Third Class or lowest class Unit miles.	Total number of third class passengers.	Average distance travelled by each passenger.
B. N. Ry. ...	877,316,000	19,123,300	45
B. B. and C. I. Ry. ...	1,091,065,000	38,461,500	28
E. B. Ry ...	554,957,000	18,618,700	29
E. I. Ry ..	2,132,430,000	40,312,800	52
G. I. P. Ry...	2,260,370,000	42,531,000	53

In this connection I can do no better than quote the following from my book on Indian Railway Economics Part I. (1922) to which I draw particular attention :—

“The figures of traffic, passenger unit miles and the average lead per passenger go to show to a certain extent that in India long-distance travelling has not been very popular inspite of the fact that railways of India extend for long-distances as each principal railway traverses several districts, provinces and the lengths from one end of line to the other extend to 609, 700 900 miles and more. It is also obvious that if the higher fare remained for the shorter distances say up to 60 miles, where the average lead is less than 30, and up to 100 miles, where the average lead per passenger is less than 50, and up to 120 miles where the average distance per passenger is under 70, and then if lower fares were charged for distances above these limits, the railway revenue ought not to be affected ; on the other hand, there would be encouragement given for long distance travelling and the earnings ought to improve.”

There is another point. The second class traffic is increasing and the problem of finding accommodation for second class passengers is getting difficult every day, and the following suggestion was made by me in the book just mentioned above :—

“ In a first class compartment, there are four sleeping berths and there is a lavatory with all the conveniences including a bathing tub. In a second class compartment, there are five sleeping berths and the same conveniences in the lavatory as in the first class excepting the bathing tub. During the day a first class is supposed to carry six passengers and second class 12 passengers in a compartment and during night 4 and 5 respectively. In the first class with two additional chair seats 6 passengers can pass the night (4 sleeping and 2 sitting) but in second class if 5 berths have been occupied and reserved from the starting station the passengers getting in at intermediate stations have to sit on boxes or the floor, because even during the night 12 passengers can enter a second class compartment. Therefore, the question is whether more lateral or Coupe compartments for the second class and less big compartments would not be more suitable in providing accommodation for more second class passengers in the same space on a train. Of course, the big compartments are more comfortable and suitable to Indian climate, but considering that the difficulty in getting sleeping berths in the night is getting more acute for the second class it seems coupe compartments would give more sleeping accommodation and also provide more sitting accommodation during the day in a carriage of the same length as at present.”

But I am afraid coupe compartments for long distances in hot weather will not be comfortable.

The third class is the most paying of all passenger traffic ; it is so because the number is so very large, and thus they give the railways enormous earnings per unit, and they require considerably less accommodation compared to what is required by the first class or second class passengers. Therefore, the smaller profit per unit repeated several times is a great gain to the railways. They should endeavour to increase the business and profits by encouraging third class travelling as far as possible especially for long distances ; this will mean larger volume of traffic, and the smaller profit per unit, several times repeated

will increase the railway profits substantially. And in the matter of operating this traffic the following suggestions might be worth considering :—

“ For many years, third class passengers were discouraged from travelling by fast trains. Even now accommodation for third class passengers on mail trains is limited ; mail trains on big railways are meant principally for the carriage of first and second class passengers. But during later years on railways like E.I.Ry., G.I.P.Ry and B. B. & C.I. Ry fast express trains were introduced and these trains consisted mainly of third class carriages, and there are one or two inter class carriages, and two first class and two second class compartments. Such express trains may not carry many passengers, who travel for long distances but these generally run full as passengers are continually boarding such trains, for short distances.

“ Colonel George Huddleston, who was General Traffic Manager of the E.I. Ry. for many years and was also for some time the Acting Agent of that line, once held the view that such fast express trains should start at intervals of every 6 hours and should run for as long distances as possible, and that slow passenger trains should run for short distances only, and act as feeders to the fast trains, which do not stop at all stations. His opinion was that slow passenger trains running for long distances meant provision of a large number of carriages because it took longer for the carriages to be turned round, on account of slowness of speed, constant stoppages and long distances.”

Lastly, it may be mentioned that the suggested abolition of the intermediate class would affect 1,06,54,000 passengers whereas the first class accounts for only 10,85,000 and the second class for 65,92,000 passengers respectively. Before any step is taken to abolish the inter class on the ground of economy the inconvenience that would be caused to more than one crore of passengers needs to be taken into consideration.

Horace Bell in his Railway Policy in India pointed out that it would pay the railways to pay premiums to 1st class passengers and to ask them to stay away so that accommodation on trains might be utilised for the paying third class traffic. But Railways cannot take such an action merely on the ground of economy.

Appendix I

Re-organisation of the Railway Department of the Government of India in matters of Administration and Control.

PAST, PRESENT AND WHAT THE ACWORTH COMMITTEE RECOMMENDED

I. The first important reorganisation in the Railway Department of the Government of India took place in 1897. The head of the whole show then was the Public Works Member, under whom were Departments of Roads and Buildings, Telegraphs, Irrigation and Railways. Thus all the Departments of communications were under one member, who might have safely been called member for communications. And what the Acworth Committee has asked for is more or less reversion to the old system.

II. From 1897 to 1905, in the Railway branch of the P. W. D., there was (next to the member, P. W. D.) the Secretary, who was called Secretary to the Government of India, P. W. D., Railway Branch. Under the Secretary, there were three Deputy Secretaries, one of whom was Director of Traffic, in charge of open line matters, the other was Director of Construction, and the third was the Accountant-General and under them there were Under-Secretaries and Assistant Secretaries in each section of the Railway branch, such as, traffic, construction, accounts, stores.

III. Attached to the P. W. D. Railway branch Secretariat there was one Consulting Engineer to the Government of India at Headquarters, who practically occupied the same position as the Chief Engineer to the Railway Board does to-day. He dealt with all technical matters and was a sort of advisor to the Railway Department Secretariat on questions in which he was an expert.

IV. Then there were other Consulting Engineers in different parts of India; they did both administrative and inspection work :—

(a) One was in Bombay who was practically the Secretary to the Government of Bombay in the Railway branch and controlled the railways under the Bombay Government, namely, the G. I. P., the B. B. and C. I., the S. M., and the B. G. J. P. Railways. These Railways were then under the Bombay Local Government.

(b) One Consulting Engineer was in Madras, who was also Secretary to the Government of Madras in the Railway branch and controlled the Madras and the S. I. Railways which were then under the Madras Government.

(c) Then there was a Consulting Engineer in Calcutta, who controlled the E. I. Railway and the B. N. Railway (the latter was controlled by a junior Consulting Engineer under the Calcutta Consulting Engineer so long as the offices of the B.N. Railway were at Nagpur).

(d) The Consulting Engineer at Lucknow controlled the Indian Midland and the B. and N. W. Railways.

In respect of the above-mentioned Company lines, the Consulting Engineer was the Government representative and certain powers in regard to administrative control were delegated to him by the Government of India. The Agents of Company lines in India communicated with the Consulting Engineers in all matters in which Government orders or sanctions were necessary. The Company Agents could not in those days communicate with the Government of India direct, as they do to-day. The Consulting Engineers were also Government Inspectors for purposes of Chapter II of Indian Railways Act IX of 1890.

In regard to State-worked State lines, the Consulting Engineers had no administrative control whatever, but only exercised the functions of Government Inspectors under the Indian Railways Act. The State Railway Agents (who were called managers then) communicated with the Government of India

direct, and had in those days more powers than the Agents of the Company lines (in fact the Companies themselves).

V. Then came the creation of the Railway Board in 1905. For many years, previous to 1905, it was felt that a change in the system of administrative control of the Railway Department of the Government of India was necessary, and it was left to Lord Curzon to carry out this change. The services of a railway expert were secured in the person of the late Sir T. Robertson, C. V. O., who was appointed special Railway Commissioner for India for three years, and, during the cold months of 1902 and 1903, he closely studied the working of Indian Railways and spent all the summer of 1902 in studying the methods of railway working in America. It was pointed out by Sir Robertson in his report of 1903 that the then administrative head of the Railway Department had never had any previous training in Railway working and management, although in every other department of the Government of India the administrative head was an expert in his own business. The Military Department had a Military Officer, the Finance Department an officer trained in finance, the Legislative Department a trained lawyer, and each Governing Department an officer trained in every subject, which came before him, whereas the highly technical Railway Department of the Government alone had as its head a non-expert officer. It was, therefore, recommended that the Chairman of the Railway Board should be a person with a thorough practical knowledge of railway working with two members under him, who should be men of high railway standing and experience similar to that of the Chairman.

The Railway Board was formally constituted in March, 1905, and was treated as a separate department of the Government of India, but subordinate to the member in charge of the Department of Commerce and Industry in the Executive Council of the Viceroy, this member, however was not a technical Railwayman, but was generally a Civilian. Thus the factor that the head of the Railway Department, immediately under the

Viceroy, was not a technical Railwayman, remained. The Acworth Committee also says that the proposed member for communications need not necessarily be a technical man.

VI. With the introduction of the Railway Board, the functions of the Consulting Engineers were abolished, and only Government Inspectors remained and the Railway agents of Company-owned and Company-worked State lines were allowed to communicate with the Government of India, Railway Department, direct and were also given greater powers, or in other words, greater powers were given to the Companies, who delegated powers to the agents in India.

VII. The duties assigned to the Railway Board were described in one of the Government publications as follows :—

“ Its deliberative functions include the preparation of the Railway programme of expenditure and the discussion of the greater question of Railway policy and economy affecting all lines, the final authority for decisions in regard to which is still retained by the Government of India. Its administrative duties include the construction of new lines by state agency, the carrying out of new works on open lines, improvement of railway management with regard to both economy and public convenience, the arrangements for through traffic, the settlements of disputes between lines, the control and promotion of the staff on state lines, and the general supervision over the working and expenditure of Companies' lines. The final authority in regard to these administrative duties has been delegated, subject to certain restrictions, to the Railway Board.”

VIII. When the Railway Board was first created, it was for a little while, owing perhaps to misunderstanding, treated as part and parcel of the Government of India Commerce and Industry Department, and cases submitted by the Railway Board to the Hon'ble Member in charge went through a lot of noting by the Secretaries in the Commerce and Industry Department.

This position, however, did not remain long.

The Railway Board was soon treated as a distinct Department of the Government of India, and the Head of the Railway

Board was treated as Secretary to the Government of India, Railway Department, and he communicated direct with the Hon'ble Member and was also given access to the Viceroy, the same as the Secretaries of other Government of India Departments. And also the designation of the Chairman of the Railway Board was altered to that of President, Railway Board, and he was allowed to overrule his colleagues (the two Members) if both disagreed with him. If only one disagreed, he had the majority on his side.

IX. There is a sort of division of portfolios between the President and the Members, such as, the President at one time was dealing with Railway projects and finance; one Member dealt with state Railway staff, Engineering and technical matters and the other with company line questions or traffic matters. But in important cases, outside the routine, both the Members noted their views and so also the President, so that there was considerable amount of repetition work in the same connection by all three.

X. The observation of the principle that the President of the Railway Board was allowed to overrule the two Members of the Board practically recognised one-man responsibility, but in this respect, there were some difficulties, because (1) in the first place, if two Members disagreed with the President on a point, they could both jointly refer the matter to the Hon'ble Member of the Executive Council in charge of the Railway Department and (2) secondly, the President must have felt a certain amount of delicacy and hesitation in overruling his colleagues, but the matter would have been entirely different had the two Members not been the colleagues of the President but acted in the capacity of his Deputies, although this is what it practically amounts to because the President could act on his own and overrule the members.

XI. With the appointment of the Chief Commissioner of Railways there is also now practically one man responsibility, according to the notification of the Government of India, but the Members yet remain his colleagues, and must therefore

be consulted and thus the Chief Commissioner must wait for the views of both the Members and, if they disagree, discuss matters with them before he finally overrules them or agrees with them.

“Two heads are better than one” is a very old proverb, and has its value, but “one-man responsibility” has been recognised to be the best in matters of efficiency and quick despatch of work, although “one-man show” is not a good one.

XII. Therefore, if the Members acted in the capacity of Deputies to the Chief Commissioner and were given certain powers in their own branches by the Chief Commissioner and acted within such powers, referring only cases beyond their powers to the Chief Commissioner, and there was division of portfolios between Members, a great deal of efficiency and quick despatch would be attained, and there would be more harmonious working. So although there will be one-man responsibility, *viz.*, that of the Chief Commissioner, there will not be one-man show, for each Commissioner will be doing his portion of work referring to the Chief Commissioner when necessary.

A great deal of detail and repetition work could be then taken off the Chief Commissioner, thus allowing him more time to think of higher problems. This is most essential during sittings of Councils when a lot of his time will be occupied there. In cases of greater importance the Chief Commissioner may consult more than one Member, but the decision in this connection should be left to the Chief Commissioner who will be responsible to the Assembly and to the Executive Council. Thus, the Members, who might at present, by the reason of their being colleagues of the Chief Commissioner, may not like the procedure of overruling, would be satisfied if they knew they were working as Deputies to, and on behalf of, the Chief Commissioner. Apparently this was intended when Chief Commissioner and Divisional Commissioners were recommended.

On the Civil Administration side the Commissioners work, not as colleagues of, but as subordinates of, the Chief Commissioner or the Local Government head.

XIII. The suggested division of work between Commissioners by assigning certain railways to each of them is like the division of work between Commissioners on the Civil Administration side, each of whom has got certain districts allotted to him.—This arrangement is suitable to the Civil Administration, where the Commissioners work in their own divisions and not at Head Quarters of the Government.

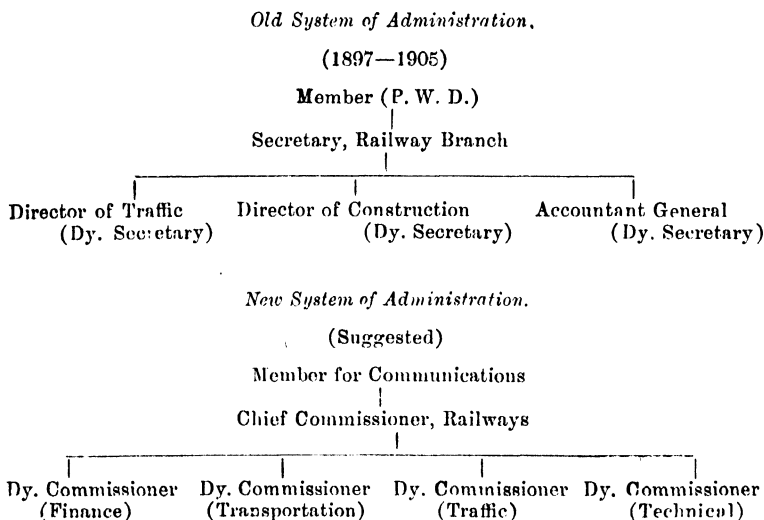
XIV. While allotment of certain railways to certain Commissioners may suit inspection work it would not be very convenient nor conducive to administrative work at Head Quarters of the Government of India.

The Chief Commissioner needs, amongst his principal Deputies, experts in various branches of Railway work, such as Engineering, Traffic, Transportation and Finance. So instead of Divisional Commissioners (who however will be all stationed at the same place) if they were called Commissioners and such portfolios were assigned to them in which they were experts, the same as is done in the case of members of Executive Council of the Viceroy and the Executive Council Members and Ministers of the Local Government, the best results would be attained. Therefore, instead of one Financial Commissioner and three Divisional Commissioners (Eastern, Western and Southern), there might be four Dy. Commissioners, as follows :—

- (1.) Dy. Commissioner, Finance.
- (2.) Dy. Commissioner, Transportation.
- (3.) Dy. Commissioner, Traffic, Commercial.
- (4.) Dy. Commissioner, Engineering or Technical.

Dy. Commissioners might hold daily meetings between themselves in matters inter-allied between their respective branches—the Chief Commissioner attending the more important meetings, the object not being to secure the votes of the majority but the views of the others, the responsibility for the decision being that of the Dy. Commissioner in charge of the portfolio concerned in each case, and of the Chief Commissioner, in cases where the principle involved was important or the powers of the Commissioner concerned were exceeded.

The procedure and system above discussed will also be in accord with the old system of 1897-1905 (reversion to which in another way is practically recommended by the Acworth Committee).



XV. The Secretariat staff would remain the same as at present, but under the revised proposal there would be two additional members or commissioners as the Acworth Committee has asked for.

XVI. The staff of experts in the Railway Board office at present consists of one Chief Engineer and there is also one Loco Officer. And also an Accountant General, who however, with his deputies and staff are practically officers of the Finance Department. The Chief Engineer and the Loco Officer might be attached to the staff of Commissioner, Technical or Engineering, and might also be consulted by the Commissioner, Transportation. There is also a proposal for the creation of an extra appointment of an expert commercial officer as Director, traffic commerce, who should be attached to Commissioner (traffic commerce). But for the present on the ground of economy in expenditure this appointment might be

postponed and only two Inspectors of traffic might be appointed to start with, and further this might be done by temporarily abolishing two appointments in Government Inspectors grade; two traffic Commercial Inspectors might be appointed in place of one Senior Government Inspector and another Junior Government Inspector. This may be tried for a year or so before more Senior Government Inspectors (Engineering) are reduced and replaced by Traffic Inspectors.

These recommendations are based on the assumption that to carry out and to create all the appointments recommended by the Acworth Committee would mean big sums, which under present condition of general finances might not be advisable to spend.

XVII. Then there is the proposed appointment of Rates Tribunal in addition. But this may mean (if the Tribunal exercises both administrative and judicial functions in regard to Railway rates matters) reduction of one Member (Traffic commerce, from the Railway Commission or Board, whatever it might be called, although four Commissioners, under the Chief Commissioner, will not be too many. If rates work is transferred to the Tribunal, the fourth Commissioner might take Development and Yard work from the Transportation Commissioner, who might then devote himself entirely to rolling stock and their movements, and to train service.

XVIII. For the present, of course, there will be no Member for Communications and the Chief Commissioner of Railways will be under the Commerce Member for some time yet.

XIX. The Senior and Junior Government Inspectors of Railways, under the Railway Board (or Railway Commission, whatever it is called) are necessary for purposes of the Indian Railways Act, Chapter II, Sections 4, 5 and 6, in the interest of public safety and also for purposes of administrative control exercised by the Government over state lines, worked by Companies, as the Government has got to see that the Company keep the lines, rolling stock, plant and machinery in good repair and good working condition. At present, there are

seven Government Inspectors and some junior Inspectors. Besides carrying out the work of inspection above referred to, the Government Inspectors do a certain amount of administrative and commercial work, on orders from the Railway Board, and supervise the work of the Native State Railways working in the Bombay Presidency and also branch line company working in all parts of India.

The inspection of permanent way, bridges, station buildings and station machinery may be said to be carried out in detail or more minutely the inspection of rolling stock and machinery is not done minutely. Therefore, the working agencies are practically relied upon to a great extent to maintain the Government property properly. In the past, in the case of big trunk lines it cannot be said that the Companies have not kept up the property in a good condition, but nevertheless the Government inspections have the tendency of keeping the Railway Engineers up to their mark particularly in the case of smaller lines. Although I am a strong advocate of appointment of Traffic Commercial Inspectors (in fact I was the first to put forward the proposal before the Railway Board and the public in an abstract form in a printed pamphlet issued in 1912 and in detail in another printed pamphlet published in March 1917, both of which were submitted to the Railway Board) I am at the same time averse to reducing the number of engineer inspectors. On the other hand, my honest conviction is that for purposes of Government control, which the Government is supposed to exercise and which the Government say they do exercise (*vide* page 60, Vol. I, of Railway Department of the Government of India Administrative Report for the year 1920-21), it is essential that amongst the Government Inspectors there should be one or two qualified Loco-men, to inspect the rolling stock and machinery but all this means money. But this, I suppose, cannot be done until more money is available. Under these circumstances, I have suggested that to start with, perhaps one senior and one junior Government Inspector may be replaced by two Commercial Inspectors only at present. The

number can be increased later on. The duties of the Traffic Commercial Inspectors were shewn in detail in my pamphlet "Indian Railways and the part to be taken by Indians in their Development," published in 1917. From page 60 of Railway Board's Administration Report (Vol. I) for 1920-21 above referred to, it will be seen that the Government may require the Companies to enter into agreements with the adjoining lines in the matter of interchange of traffic and rolling stock, through rates and running powers, etc., and the Government have powers as regards train service and to see it so regulated as the Government may require. The Government have also powers to fix the maximum and minimum rates and to settle the goods classification and also to prescribe the extent to which, even within the maximum and minimum limits, the railways may vary the said rates in respect of distance, weights, special conditions, etc.

XX. While in this connection, I would invite special attention to pages 247 to 260, Chapter VI of my "Monograph on Indian Railway Rates" in which I dealt with :—

(a) Functions of the Board of Trade in London in connection with the settlement of disputes between the railways and the public.

(b) Control of rates by the Board of Trade, the Railway Commission in England, and by the Interstate Commerce Commission in U. S. A.

(c) Jurisdiction of Railway Commission in England.

(d) The powers of the Government of India under the Railway Act and the Contracts with the Companies.

Since the "Monograph on Indian Railway Rates" above referred to was written in 1918, there have been created a Rates Tribunal in England.

XXII. In India, we have to deal with special conditions as the "Principle of Government-owned Railways being leased to Companies to work, is almost peculiar to India." Moreover, the Indian State Railways, whether worked by the State Agency direct or through the Agency of the lessee Companies, are treated as Commercial concerns for purposes of earning money for the

public treasury as distinct from State Railways in some parts of the world, where they are worked not purely as Commercial concerns but as great public works to render service.

XXII. Therefore, the Government of India, Railway Department, have two distinct functions in regard to the Indian State-owned Railways, first as owners of the Government Commercial Transport concerns and in this capacity they have to see that these commercial concerns bring a fair return on the money invested, the other function is to see that the public get the full benefit of the railways and that they are used to render the greatest public service (the main purpose for which the railways were introduced in this country) and that the railways do not create undue preference, quote unreasonable rates, withdraw or decline reasonable facilities, and do not hamper trade and industries and economic development of India. Therefore, the position is totally different in India to the conditions in England or in U. S. A. In England and in U. S. A. the Railway Commissioners, whose office is a permanent one and is disentangled from private business, would treat any complaint put before them from point of view of equity and law, and adjudicate between the interests of the public on the one part and of the private corporation or Companies owning the railways on the other. In India, the real owners of the railways are the Government. Therefore the public, *i.e.*, the taxpayers are the owners, and the users of the railways are also mainly the Indian public. Thus, the Government have two-fold duties, namely, of affording and securing such a system of good management as shall provide all the legitimate advantages of railway communication for the community at large and help the industrial and economic development of India and at the same time secure a reasonable return on the money invested at least until the finances of India are sound. Hitherto, both the duties were vested in one authority, namely, the Railway Board. In the future, it seems the administrative duties are going to be vested in the Railway Board and the judicial duties in the Rates Tribunal.

XXIII. A Rates Tribunal or something of the sort was practically promised to the Indian public in 1887 (*vide* last 3 paragraphs on page 256 of my "Monograph on Indian Railway Rates"). But this could not be done owing to the existence of the old guaranteed companies. In introducing the Railway Bill in the Legislative Council on 25th October 1888, the then Law Member remarked that the powers of the Government of India in respect of some of the railways were limited by the terms of the contracts and that care had to be taken to maintain the provisions of the contracts as far as possible. Again on 21st March 1890, in dealing with the report of the Select Committee on the Bill, the Law Member in referring to the right of the Companies said "indeed I am not sure that in our anxiety, not to interfere with vested rights to have not given more liberal interpretation to some of the provisions of these contracts than court of law would have done."

Again there was a hint given in 1899 that there might be a permanent Railway Commission in India (*vide* Government of India Administration Report on Railways for 1899-1900, extracts from which are quoted on page 98 of the "Monograph of Indian Railway Rates"). Now the point is what duties and powers would be assigned and delegated to the Rates Tribunal.

At first sight, it would seem that the regular course would be to give the power of sanctioning the classification and maximum rates and fares to the Railway Board (or the Railway Commission whatever it is called) as part of administrative work, and the Rates Tribunal should deal with (i) complaints in the matter of undue preference, facilities not granted, unreasonable and high rates, fares and classification and want of facilities affecting development of commerce, trade or industry, (ii) disputes between Railways as regards through rates, interchange of traffic and rolling stock or in regard to traffic or working agreements, grant of adequate facilities for through traffic etc., etc.

XXIV. Having regard to the peculiar and particular conditions of India in regard to railways, it may be more convenient, economic, useful and suitable if amongst the three members of

the Tribunal (which would probably consist of a lawyer or a justice, a commercial representative and a railway representative) the railway representative is also in charge of the Railway Board's commercial or rates portfolio. Apparently the intention of having three members on the Tribunal is that the lawyer or the Chairman will hold an equilibrium between the two interests namely of the users and of the railways, the former being represented by the Commercial Member of the Tribunal and the latter by the Railway Member. The Commercial Member will see that the commercial side of each case is properly brought out and represented, and the Railway Member with his expert knowledge of making rates and fares and traffic conditions of India, etc., ought to be able to bring out all the facts, figures and information from the witnesses in order that the real position of both sides is placed properly before the Tribunal. With these two experts the Tribunal will be greatly helped and the justice of the Law Member, *i.e.*, the Chairman, will control the proceedings, and his experience in law will be more useful in the examination of the witnesses, and in the same way as he will get the railway side of the case from Railway rates expert, the Commercial side of the case from the commercial expert, he will also be able to give to these two legal aspects of the case from point of view of equity and law.

Thus at least in the beginning there might not be very great objection or difficulty if the Railway Member of the Rates Tribunal is also the man in charge of the rates or Commercial work of the Railway Commission (or Railway Board, whatever it is called), unless it is held that on principle it will be wrong that the man sitting as one of the judges on Tribunal should also do administrative work, which he may have to criticise on the Tribunal. There is a very great deal of force in this argument and I am afraid objections on this ground cannot be got over.

In this event, the Tribunal, apart from dealing with the complaints in specific cases should do some more work. It should be ruled that although the Railway Commission (or the Railway

Board) would sanction the rates and fares (maximum and minimum) and the classification, a certain time should elapse before they are introduced, *i.e.*, after notification and within this time the public should have the right to lay their complaints before the Tribunal. Complaints of specific rates being unreasonable or preferential, when quoted by railways within the limits fixed by the Government, could be made to the Tribunal at any time and this should be made clear.

ORGANISATION OF INDIAN RAILWAYS.

Under the Board of Directors or the Railway Board there is the Agent of each railway, who is the administrative head of a particular railway and responsible for everything.

Under him are the departmental heads, *viz.*, Chief Engineer, General Traffic Manager, Locomotive and Carriage Superintendents, Stores Superintendent, Auditor, etc.

I. The Engineering Department builds and maintains the permanent way (or the railway road) bridges, buildings, etc.

II. The *Mechanical* Department erects and maintains engines, carriages, and wagons and is responsible for the running, upkeep and maintenance of locomotives and carriages and of workshops.

On more important Railways, the functions of the Locomotive Engineers and of the carriage and wagon Engineers are separate, while the former is responsible for locomotive engines and the loco-workshops the latter is responsible for carriages and wagons and for the carriage and wagon workshops.

On all important railways in India, but the G. I. P. Railway, the Locomotive Superintendent is also responsible for the running of Locomotive engines, supply of motive power and for the upkeep and maintenance of engines and their repairs, during running, and for the engine crew, and the carriage Superintendent for upkeep and maintenance of carriages and wagons during running.

III. *Traffic Department*.—This Department comprises (on all railways but the G. I. P.) the functions of securing traffic,

booking, loading, unloading, delivering and accounting for traffic, collecting receipts as well as the carriage and movement of traffic—passengers and goods.

The Head of this Department is called General Traffic Manager and under him the work of

(1) Securing, booking and delivery of traffic and collecting and accounting for receipts, fixing of rates and fares, claims for loss of or damage to goods and parcels, etc., is entrusted to a Traffic Manager or a Commercial Deputy who is also in charge of all booking and Parcels Offices, goods sheds and of all staff working in them ;

(2) the train service, control and movements of carriages, wagons and trains is given to a Transportation Superintendent, who is responsible for working of all stations and yards ; all staff in them and guards of trains are placed under him.

On the coal-carrying lines (B. N. R. and E. I. R.) there are Coal Managers responsible for coal traffic work, *viz.*, booking, loading and unloading and despatch and also for control and distribution of wagons and for coal trains in the Coal Districts only.

On the G. I. P. Railway, recently a change has been made, under which all transportation and movement work, including station and yard working, as well as running of engines, has been entrusted to a Chief Superintendent of Transportation, who is also responsible for rolling stock and their petty repairs, during running, and the engine sheds and all running staff, of both Traffic and Loco, station and yard staff have been placed under him. Then on the G. I. P. Railway, there is a Chief Mechanical Engineer, who is responsible for the workshop (Loco, Carriage and wagon) and for heavy repairs to, and renewals of, engines, carriages, wagons and machinery. Further, there is the Chief Traffic Manager, responsible for securing, booking, delivery of traffic, collection of receipts and for working of the booking, parcels and the goods offices, and for fixing of fares and rates, and dealing with claims for loss of damage or pilferage to goods. The new G. I. P. Railway system, which came into effect

from 1st November, 1922, is based on the American system of Railway organisation, which has been adopted on some of the English Railways also.*

IV. Stores Department purchases and distributes all stores.

V. Audit and Accounts Department is responsible for all accounts and for safe custody of cash and for disbursements of money, and is also the financial adviser to the Agent and to the Board of Directors.

VI. Medical and Health Department has under it all railway hospitals, dispensaries and sanitation.

Besides on some Railways there are Electric Departments and Colliery Departments separate, where there is necessity for such separate Departments.

Under the heads of Departments there are the usual District or Divisional officers, such as District Engineers with Assistant Engineers under them in the Engineering Department, District Superintendents of Transportation with Assistant Superintendents of Transportation under them, District Commercial or Traffic Superintendents with Assistant Superintendents under them, District Carriage and Wagon Superintendents, District Stores Superintendents, District Medical Officers, etc., etc.

* On the G. I. P. Railway Electric Telegraph and Block signalling have also been placed under Chief Superintendent, Transportation.

Appendix II.

SOME EXTRACTS FROM " MONOGRAPH ON INDIAN RAILWAY RATES " (1918).

**A DISCUSSION ON ADJUSTMENT OF RATES BY ALTERNATIVE
ROUTES CAUSING UNDUE PREFERENCE AT STATIONS
SHORT OF THE POINT OF REAL COMPETITION.**

Some interesting features in rates making of a railway will be seen from the following statement of rates :—

Rates for wheat from stations on the Jubbulpur-Itarsi Section of the Great Indian Peninsula Railway to Delhi.

DISTANCE TO DELHI—

ROUTE No. I.		ROUTE No. II.		Stations from.				Rate by Route (1).		Rate by Route (2).							
Via Great Indian Peninsula Railway direct (via Itarsi, Jhansi, and Agra and Agra Delhi Chord).		Via East India Railway (via Jubbulpore and Allahabad).															
Great Indian Peninsula Railway.		Great Indian Peninsula Railway.		Great Indian Peninsula Railway.		TOTAL.		Special rate.		Ordinary scale rate.		Great Indian Peninsula Railway.		East Indian Railway.		TOTAL.	
Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Rs. A. P.	B. A. P.	Rs. A. P.	B. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
627	19	618	637	Shahpura	...	...	...	0 7 11	...	0 1 3	0 6 8	0 7 11	...	...	...	...
613	33	618	651	Goteagaon	...	...	...	0 8 4	...	0 1 8	0 6 8	0 8 4	...	...	...	...
603	43	618	661	Karakbel	...	...	...	0 8 7	...	0 1 11	0 6 8	0 8 7	...	...	...	...
594	53	618	671	Narsingpur	...	...	...	0 8 11	...	0 2 3	0 6 8	0 8 11	...	...	...	...
584	63	618	681	Kareli	...	...	...	0 9 2	...	0 2 6	0 6 8	0 9 2	...	...	...	...
646	...	618	618	Jubbulpur	...	...	...	0 6 8	...	...	...	0 6 8	...	...	...	...

The rates by route (I) are those obtainable by route (II) under the Great Indian Peninsula Railway rule, which specifies that in local booking between any two stations on the Great Indian Peninsula Railway the rates obtainable by the alternative foreign railway route are applied to the local route and the traffic carried thereby provided that the rates do not fall below the minimum, which they do not in this case.

In the first place, it may be pointed out by the public that while the rate by the Great Indian Peninsula Railway route for 646 miles from Jubbulpur to Delhi is Re. 0-6-8 the rates from Shahpura, Gotegaon and Narsingpur for 627, 613 and 594 miles by the same route the Great Indian Peninsula Railway route No. (I) are Re. 0-7-11, Re. 0-8-4 and Re. 0-8-7 respectively, *i.e.*, the rates for shorter distances are higher.

The Great Indian Peninsula Railway Case is this.

Their ordinary scale rate from all their stations, including Jubbulpur to Delhi, is Re. 0-9-3, *i.e.*, the rates for shorter distances are not greater although they are not lower ordinarily.

But as the East Indian Railway rate from Jubbulpur to Delhi for 618 miles is Re. 0-6-8, the Great Indian Peninsula Railway have between the same points (*viz.*, between Jubbulpur and Delhi) equalised their rates with those of the East Indian Railway and have reduced the Jubbulpur-Delhi rate from Re. 0-9-3 to Re. 0-6-8 per maund although their distance is 646 miles against the East Indian Railway distance of 618 miles. This is under agreement with the East Indian Railway. Even if the Great Indian Peninsula Railway had not reduced the rate from Jubbulpur junction they would have had to do so from their internal stations short of Jubbulpur such as Shahpura, Gotegaon, Narsingpur, if they wanted to retain the traffic, originating on its line (which line also offers the shortest route) to their local route instead of letting it go over the East Indian Railway *via* Jubbulpur (longer route) thus giving the Great Indian Peninsula Railway a very short lead only.

The G. I. P. Railway have therefore, for such internal stations, quoted special rates (lower than their scale rate of

Re. 0-9-3 and equal to the rates obtainable by the longer route (*viā* Jubbulpur), but in doing so the rates for longer distances (by the G. I. P. Railway) from stations near Jubbulpur have become higher than the rates for shorter distances. For instance, while the rate from Gotegaon, 613 miles to Delhi *viā* the G. I. P. Railway direct (and 651 miles *viā* Jubbulpur) is Re. 0-8-4 per maund, that from Shahpur (627 miles by the G. I. P. route (and 637 miles *viā* Jubbulpur) is Re. 0-7-11.

The G. I. P. Railway argument will be that the rates are not fixed by the shorter route but by the longer route, and that if the latter is taken into account (although the traffic follows the former or shortest) the rates for shorter distances are not higher than for longer distances and that but for reductions on the part of the E. I. Railway in the rate from Jubbulpur the despatchers at the internal G. I. P. Railway stations would not have had the benefit of a lower rate than Re. 0-9-3.

But the the reply of the merchants, say at Gotegaon or at Narsingpur, will be that under the scale they had same advantage in the Delhi market as the despatchers at say Shahpura and that although they have now the benefit of low rates they cannot afford to compete with Shahpura, which has therefore drawn away some of the traffic which Gotegaon or Narsingpur got formerly.

The merchants may also point out that taking the shortest route *viā* the G. I. P. Railway Gotegaon or Narsingpur is nearer Delhi than even Jubbulpur by the shortest East Indian Railway route.

They may further say that they do no object to the G. I. P. Railway quoting Re. 0-6-8 rate from Jubbulpur, but what they point out is that if the G. I. P. Railway can afford a rate of Re. 0-6-8 from Jubbulpur to Delhi for 646 miles they can surely afford a lower or an equal rate from Narsingpur or Gotegaon for 594 and 613 miles respectively.

But the G. I. P. Railway reply again will be that in case they had not reduced the rate by their route from Jubbulpur

to Delhi and have it the same as by the East Indian Railway route, the merchants could not have raised the point of undue preference and that Jubbulpur would have yet had a lower rate than Narsingpur or Gotegaon with this difference that the G. I. P. Railway would have been the loser without any gain to the Narsingpur or Gotegaon merchants. This is a very forcible argument.

However, there is one more point. If the Great Indian Peninsula Railway had not reduced the rates they would have earned on Narsingpur or Gotegaon traffic not more than Re. 0-1-8 or 0-2-3 per maund as the traffic would have then gone *vid* Jubbulpur over the East Indian Railway. Whereas if they charge Re. 0-6-8, as the merchants may ask for, from stations short of Jubbulpur the same rate as from Jubbulpur itself they would be—(1) retaining the traffic to their route and (2) earning much higher than Re. 0-1-8 or 0-2-3 and (3) at the same time adhering to the principle that the charge for the lower distance should not be greater

The G. I. P. Railway will naturally say that they are minimising the loss in their earnings by charging for internal stations such rates as they can afford to charge without loss of traffic to the G. I. P. Railway, whereas the merchants' case is that the G. I. P. Railway rates are causing discrimination and placing the merchants at stations nearer Delhi at a disadvantage as compared with merchants at stations farther away, and that if the G. I. P. Railway can afford to accept the same rate as the East Indian Railway at Jubbulpur they should be able to accept the same rate for internal stations. To put briefly the merchants' case is this :—

“ Minimise your loss as far as possible but at the same time consider our loss too. Do not cause such discriminations in our rates so as to reduce our chances of profit at a market to which we are nearer than places to which you give lower rates of freight. We are being deprived of our geographical advantage by your artificial rates “ making.”

There is a great deal to be said on both sides and the case of each side is strong on its own grounds. The English Act, provides as follows :—

“The commissioner shall have power to direct that no higher charge shall be made to any person for services in respect of merchandise carried over a less distance than is made to any other person for similar services in respect of the like description and quantity of merchandise carried over a greater distance on the same line of a railway.”

There is no such clear law in India. While this above-quoted clause is in favour of the merchants, the following clause seems to protect the railways to a certain extent :—

“In deciding whether a lower charge or difference in treatment does or does not amount to an undue preference the court having jurisdiction in the matter or the commissioners, as the case may be, may, so far as they think reasonable, in addition to any other consideration affecting the case, take into consideration whether such lower charge or difference in treatment is necessary for the purpose of securing, in the interest of the public, the traffic in respect of which it is made and whether the inequality cannot be removed without unduly reducing the rates charged to the complainant. Provided that no railway company shall make, nor shall the court or the commissioners, sanction any difference in the tolls, rates, etc., or charges made for or any difference in the treatment of home and foreign merchandise in respect of the same or similar services.”

A great deal depends on what in each case can be fixed, on circumstances of the case, the limit beyond which the reduction will be undue. The merchants in the particular case will make out for reasons already stated that such a limit in the particular case would be Re. 0-6-8 whereas the G. I. P. Railway case would be that the limit would be the rate obtainable by the longer route. It seems that the weight of the argument in the interests of public would be in favour of the merchants at Narsingpur or Gotegaon, whose main argument would be that formerly they

were on an equal footing with Goteagaou, and that although they are nearer Delhi they have been placed at a disadvantage and are deprived of the advantage of their geographical position by artificial rates making.

Appendix III.

EQUAL MILEAGE RATES.

The effects of equal mileage rates (if rigidly adopted in preference to rates on the basis of "what the traffic will bear") were summarised as follows by the Select Committee of July 1882, on railway rates and fares in England :—

"(a) It would prevent railway companies from lowering their rates and fares, so as to compete with traffic by sea, by canal, or by a shorter or otherwise cheaper railway, and would thus deprive the public of the benefit of competition, and the company of a legitimate source of profit.

"(b) It would prevent railway companies from making perfectly fair arrangements for carrying at a lower rate than usual goods brought in large and constant quantities.....

"(c) It would compel a company to carry for the same rate over a line which has been very expensive in construction, or which, from gradients or otherwise, is very expensive in working, at a same rate at which it carries over less expensive lines.

"In short, to impose equal mileage rates on the companies would be to deprive the public of the benefit of much of the competition which now exists, or has existed to raise the charges on the public in many cases where the companies now find it to their interests to lower them, and to perpetuate monopolies in carriage, trade, and manufacture in favour of those rates and places which are nearest or least expensive, where the varying charges of the companies now create competition. And it will be found that the supporters of equal mileage rates when pressed, often really mean, not that the rates they pay themselves are too high, but that the rates that others pay are too low.

"Pressed by these difficulties the proposers of equal mileage rates have admitted that there must be numerous exceptions,

e.g., where there is water competition (*i.e.*, at about three-fifths of the railway stations of the United Kingdom), where low rates for long distances will bring a profit, or where the article carried at low rates is necessary, such as coal. It is scarcely necessary to observe that such exceptions as these, whilst inadequate to meet all the various cases, destroy the value of 'equal mileage' as a principal, or the possibility of applying it as a general rule."

It may, however, be pointed out that some of the above arguments do not apply against equal mileage rates in India with same force as in England owing to difference in conditions, such as extensive water competition, which exists in England but not very largely in India.

The complaint is generally made against differential or preferential rates when equal mileage rates are advocated, and the conditions under which most of the preferential rates have been quoted in England, do not generally apply in India.

For instance, in England, not including Scotland, it was said in 1906, that there were 8,900 railway stations in the country and 70 ports. The ports, in addition to being available for entrance of foreign merchandise, "were used for the distribution of local merchandise throughout the country, traffic being brought to ports by agency of railways and then taken from port to port" and also to the interior by water in competition with railways and "the stronger justification for lower carriage and for differential rates was water competition than anything else." These conditions are not general in India.

It is true equal mileage rates are rigid and can only be quoted for short distance traffic. What is really wanted is sliding or telescopic scales of rates for long distances the rate per mile going down with the increase in distance although it is not necessary, under this method, to quote preferential or differential rates, rates lower for longer distances than for the shorter distances on the same rate, for the same kind of traffic under more or less equal conditions.

Appendix IV.

COAL TRAFFIC TRANSPORTATION.*

The question of Coal Traffic Transportation has been occupying the attention of all concerned for some time past. The public have seen that a Committee has been appointed to regulate the transportation of coal but the results are not yet seen, as perhaps the Committee has not yet started the work.

2. There is the Coal Transportation Officer responsible for the transportation of coal, there is the Railway Board's Mining Engineer responsible for the purchase of railway loco coal and Government and Military coal. He also purchases coal for such concerns as have to execute Government orders, *e.g.*, flour or jute mill, as have contracts for Government requirements. Over and above, there is the Director of Wagon Interchange responsible for the supply of wagons for traffic passing over two or more railways. It is believed that the Mining Engineer of the Railway Board has got about 3 million tons of coal in arrears as well as in contract. Now loco coal has preference over industrial and public coal. This is all right so far as it goes but the only point is, should the colliery owners or rather the trade be compelled to tender for and accept such price for loco coal as can be got because of the sole reason of the preference in the matter of wagon supply for loco coal. When collieries find that they cannot get wagons for any other coal than loco coal there is no alternative for them but to give this coal preference.

3. Some of the colliery owners say that for some reasons or other they have to go through agents of brokers to sell coal for railway loco purposes to the Mining Engineer of the railway

* This note was written for the information of the Behar Government and the copy for the Behar Government was handed over personally to Lord Sinha and at Ranchi when the Railway Board Member the Hon'ble Mr. Sachchidananda Sinha came up to Ranchi to discuss the subject with the Behar Government.

Board. It is said that there have been instances where collieries in reply to their direct offers of coal have been told by the Railway Board's Mining Engineer that this coal was not required but at the same time the very same coal has been accepted by the Mining Engineer of the Railway Board through other coal firms. Why should this be so? There would have been some sense in the intervention of a bigger coal firm had it not been seen that in the case of failure on the part of the colliery actually supplying the coal the penalty, in the way of curtailing or stopping supplies, falls on the collieries actually supplying the coal and not on those who made the contract with the Mining Engineer—whereas if the firms making the contracts were held liable and their supplies were stopped or curtailed there would have been some sense in their making middlemen's profit at the expense of the colliery actually supplying the coal and of the public (I say public, because the middlemen's profit is paid by the railway buying the coal and the big railways are the property of the State). Therefore, the public cannot be blamed if they say that reasons for allowing middlemen to make profit are not clear. Further, the Mining Engineer confines his purchases to a certain area. Large contracts are placed with collieries in that area far in excess of what such collieries can hope to clear with the result that the supplies are in arrears and large stocks lie at the collieries of raised coal, because after all, even though a colliery may have a large output and large raisings, they are not much good, if the clearances from these collieries do not keep pace with their raisings. The obvious remedy would be to distribute the Mining Engineer's orders for loco coal between a large number of colliery throughout the coal fields instead of confining the orders to a given or certain area. It may be said that the quality of coal has a great deal to do with the placing of orders in a certain area, but it has been seen at the same time that the same coal which sometime back came under the category of third class coal suddenly became first class. Therefore, it is difficult to understand why loco coal purchases should be confined to certain areas.

4. The real points at issue are whether there is any possibility of increasing the capacity of the various depots or yards in the Jherria Coal Field, and also whether the supply of public and loco coal wagons can be increased under existing facilities.

5. It is best to divide this paper at this stage into following parts :—

- (a) Freer distribution of Mining Engineer's purchases.
- (b) Basis of supply and raising and clearance of stocks of coal and suggestions to improve matters in the direction of bigger and quicker transport.
- (c) Pooling of wagons.
- (d) Marshalling of coal trains to facilitate transport.

FREER DISTRIBUTION OF MINING ENGINEER'S PURCHASES.

6. It has already been stated that because of orders for loco coal placed by the Mining Engineer with certain agents, others are compelled to sell their coal to such agents. Also the effect of placing orders in a certain area with collieries not having the full facilities to clear their stocks and raisings, has been briefly touched upon.

7. The effect of placing orders with collieries in a given area would not be so very harmful if the quantity placed with a colliery is not beyond its clearing capacity, *i.e.*, not more than the basis. But that is not often so. The result is that the collieries are unable to get wagons beyond the number allotted under the basis. (Explanation of this basis will be given later. Immense stocks of coal therefore lie on the ground of the collieries and it is well known that the coal in those stocks "go on continually depreciating in quality, specially those rich in volatile matter, due to the action of the sun and atmospheric influences and become broken into small or slack by pressure and traffic." Therefore, regular supply of adequate number of wagons which the collieries can deal with should only be supplied and raisings

limited to these wagons. At the same time it is also essential that the stocks that have been accumulated should be cleared. But it should be impressed that no more coal should be raised than can be cleared. The accumulated stocks have got to be removed; but if this has to be done within the existing capacity of the depot yards (such as those at Jherria, Pathardihi, Kusunda, Katrasgarh) it will take ages and at the same time public traffic will suffer. Therefore, it is necessary to find out some means of clearing this accumulated stock. This point will be dealt with later on.

8. Under the present system of purchase when orders are placed (without taking the capacity of depot station yards and colliery sidings) for loco coal in quantities far in excess of the capacity to clear, the public supplies of wagons become practically *nil* in that area, and thus the coal buying public and those collieries which do not get orders for loco coal suffer owing to this preferential treatment. As already remarked it is difficult to understand that such orders are placed mainly because of the reason of the quality of coal, for it has been seen during recent years that third class coal of former days has become first class and the point was raised by one of the witnesses before the Railway Committee in Calcutta that the very same coal which was considered third class became first class when in different and in more influential hands. It is, therefore, suggested that the classification of coal be made by a Committee, consisting of representatives of collieries in the coal districts, the Railway Board's Mining Engineer, presided over by the Chief Inspector of Mines in India, and the voice of the last-named official should count a great deal. This is not a very difficult matter, because the seams of the various collieries are known as also the quality of each seam, and in doubtful and new cases personal inspection may be made. Once such a classification has been made, it will pave the way for a long time and avoid grounds for complaint. Then only it will be known whether there is any justification or necessity for placing orders for loco coal with certain collieries only, and to confine them at times to certain areas, blocking the capacity of the railway lines in that area.

BASIS OF SUPPLY AND RAISINGS AND CLEARANCE OF STOCKS OF COAL.

9. Now the next point of importance is the basis. First of all it is essential to find out for the information of the Coal Transportation Officer very accurate information as to the raisings and stocks of collieries—this information should be with the Coal Transportation Officer every fortnight and some staff of his should work in combination with the office of Chief Inspector of Mines in the Coal Fields to get the information. Now after this information has been obtained and compiled, it should be published and sold at a nominal price so that every colliery can purchase it. The object of this publicity is first, to check this information as any colliery can contradict this information if it be incorrect. Secondly, on this information will be formulated the basis of supply as far as possible, subject of course to the capacity of each colliery to receive and clear wagons. First of all wagons are supplied to each area coming within the jurisdiction of what are known as depot stations (*e. g.*, Jherriah, Pathardihi, Katrasgarh, etc.). Each depot station has got a yard where wagons are received sorted and despatched, and the area under the jurisdiction of this yard (*i. e.*, all the collieries served by this yard by means of pilots) cannot get more wagons than each such yard can cope with.

10. Now, out of the total number of wagons which each depot station gets, each colliery receives its proportion, and that proportion is based on the raisings of the stocks, but also should be subject to the limitations of its clearing capacity, and where the facilities in the way of sidings and loops are not sufficient, a note should be kept of what the adequate facilities should be and details given to railways so that they can take action in time. The original basis of a colliery may, in some cases, be greater than what wagons it could get, because the capacity of the depot station yard limits the number of wagons for all its collieries and then the number of wagons available is divided or distributed in ratio of the original basis.

11. Mr. Arthur Watson, C.B.E., General Manager, London & North Western, and Lancashire and Yorkshire Railways, at a meeting of the Institute of Transport on April 18, 1921, remarked that on account of limited accommodation in colliery yards it was necessary that a Railway Company should give an effective clearance of loaded wagons and keep up a constant supply of empty ones, because otherwise the work at pits would be stopped. With this object in view, he suggests, the following information should be in possession of the Central Office daily:—

- (a) Available wagon accommodation in each colliery yard.
- (b) Number of wagons actually in the yard, loaded and empty.
- (c) The probable number of wagons which will be turned out and their destination.
- (d) The number of wagons which will be required to deal with the traffic flowing.

12. This information is said to be very useful in enabling the Transport Officer to keep the work of every colliery under his view. If, in addition to this information, say every third day the Coal Transportation Officer has the raisings and the stocks of each colliery every fortnight, the entire coal transportation would be more fairly and better dealt with. The Coal Transportation Officer should have a competent staff to keep this information properly compiled in a form, from which one can readily see whether there has been a fair treatment or not, and the public should have access to such information. The Coal Transportation Office can only be useful and best serve public interests, if it is made ideal for making the best arrangement for the concentration and distribution of empty goods rolling stock in conjunction with railways, and for this purpose, the Coal Transportation Officer should have up-to-date information under the heads given above and receive hearty co-operation from the railways and the Railway Board's Mining Engineer.

13. It was remarked by Mr. Watson of L. & N. W. Railway, England, in being, "able to label the wagons direct from the point where they become spare, to the place where they are required, this avoids unnecessary handling at intermediate sidings." It was further stated by him "that not only is a saving effected in train miles and engine hours by the adoption of this arrangement but the existing wagon stock is put to more extensive use, thus allowing additional traffic to be dealt with without much increase in rolling stock."

14. The Railways have, it is said, their contracts (placed through the Railway Board's Mining Engineer) in arrears. In order to clear such arrears and also in order to enable the Mining Engineer in case of necessity to place order for loco coal with particular collieries (which are in a position to receive, deal with and despatch rakes of full trains), full rakes of empties should be booked to such collieries that can deal with them.

15. If railways requiring coal book (under arrangement with the Director of Wagon Interchange, the Coal Transportation Officer and the Railway Board's Mining Engineer) empty wagons of their own and label such wagons direct to the collieries and these wagons are run as one intact train, they would go straight from the point of despatch to the collieries without break and that would tremendously save work not only in the yards of the coal depot station (such as, Jherria, Pathardihi, Katrasgarh, etc.) but in other marshalling yards ahead and such rakes of empties should be loaded and returned, labelled to the Railway concerned (even to such destination stations as Lucknow, Lahore, Kurachee, etc.) intact, whereby the following advantages would be gained :—

- (a) Depot stations being thus relieved, to a certain extent (if not to a greater extent) would be able to receive and deal with more wagons for coal other than loco coal.
- (b) The Railway contracts would be better dealt with in this manner and at the same time it will not be to the detriment of other coal companies because they

can supply other coal (public and industrial coal) *i. e.*, collieries which do not get loco coal contracts would be able to get wagons for public and other coal and they would not then complain. They now complain when they do not get loco contracts because they cannot get other contracts, preference being given to loco coal wagons.

16. When a certain coal depot or depots are fully or nearly fully engaged in receiving, distributing empties for loco coal and in sorting marshalling and clearing them, when received loaded from the siding and collieries, other coal has hardly any chance.

17. If the system of booking empty rakes and sending them back in full train loads is found to give satisfaction and to facilitate working, there is no reason why this system should not be extended to industrial coal, *e. g.*, for mills at Ahmedabad, Bombay and Carnatic, etc., and a charge made for sending such wagons.

18. Now in this connection there is one more point to be considered. When the coal rates were revised in November 1906, I was asked to put up a note on the whole question to form the basis of an agreement between the coal-carrying railways, particularly in regard to the areas to be divided between the E. I. R. and the B. N. R. and my note did form the basis of this agreement. It was considered advisable to fix, if possible, the limit beyond which the longer routes should cease to equalise with rates obtainable by the shortest route. I have given extracts from this note on pages 161 and 162 of my "Monograph on Indian Railway Rates." It will be observed therefrom that in those cases of traffic for which say the B. N. Railway quote equal rates with those of the shortest route *viâ* E. I. Railway, the distance say for instance in the case of Agra, exceeds by the B. N. Railway longer route by 54% and say in the case of Delhi and *viâ* (for the Punjab Coal) by 46%. Even an attempt was made (as will be seen from the first para. of page 162 of the same book) to equalise for Cawnpore by 106% longer route.

One of the strongest points, other than that of the unremunerative rates, made in that note was that a very large number of wagons would be required if such circuitous routing was adopted. However, this did not carry much weight at the time, although the Cawnpore traffic was abandoned by the B. N. Railway.

19. But at the present moment, reconsideration of this point might be desirable with a view to determine whether it will not be advantageous to confine coal requirements of the Northern and North-Western India, for which the E. I. Railway will be the shortest, to collieries on the E. I. Railway, and for the South and South-Western India to collieries on the B. N. Railway (on page 160 of my Monograph on Indian Railway Rates will be found a table showing which places in India are shorter from the Bengal fields by the E. I. Railway and also which places are shorter by the B. N. Railway) whereby wagons would be occupied in transit for a shorter period as compared with the time occupied on the longer route. Of course, when the shorter routes are congested, longer routes have to be used, the same as was done during the war. It is obvious that the employment of circuitous routes has been one of the chief reasons for delays to wagons and a great detriment to the quick turning round of wagons.

POOLING OF WAGONS.

20. In connection with the supply of wagons, I do not lose sight of the fact that so far as the colliery district is concerned there is pooling of wagons, but while admitting that the pooling of wagons is useful in many ways, the sending down of rakes and of booking the rakes will be very useful; and if an extra charge is made to industries for whom such rakes are booked, they would, I feel confident, be willing to pay something in addition to railway freight in order to get supply of wagons in view of the loss they suffer at present.

21. I am aware that Conference rules require that the railway on which the traffic originates should as far as possible supply the wagons, and that in cases of large number of wagons

being absent on a foreign railway a call is to be made. I do not want this rule to be disregarded and rakes may be counted in the total interchange tonnage.

22. The supply of foreign railway wagons for the use of coal for such foreign railways is not an entirely new thing. It was done in years past, but the coal-despatching railways objected to these rakes as they had to pay hire, and preferred, as far as possible, to supply wagons of their own. From the point of view of the coal-despatching railways, if they had sufficient wagons, the latter is of course the best, but they have not got sufficient wagons now.

23. The adjustment of tonnage and the calls under Conference Rules will prevent any Railway getting denuded of its rolling stock by sending such rakes. On the other hand, if rakes are used by any one railway for bringing in coal for industries, and industries pay for them, the money thus earned may, with the sanction of the Government, be used for providing additional rolling stock, and in that case the cry for building of private wagons will not be so pointed.

24. Further, it is said that in pooling of wagons there is some difficulty in the matter of spare parts, which are not always available on foreign railways, and with the present pooling of all railway wagons for coal traffic this may be somewhat difficult. But with known quantities in the matter of number of wagons which will be booked under the rake system and by fixed routes *and with wagons back to the parent line oftener and much quicker, repairs will be facilitated in the home line shops and also convenient depots for spares could be arranged.* Under the present system South Indian Railway wagons may come to the E. I. Railway and allowed to run between E. I. Railway and the N. W. Railway without seeing the face of the South Indian Railway for months together.

25. But even then if experience shows that a large number of wagons of any particular railway is on the line of the coal-despatching railways it should be ascertained what is the number of such absent wagons in a month and then such railways as

have these wagons can be given spare parts for repairs to that number of wagons.

26. I fully recognise the advantages of pooling of wagons specially in the matter of avoiding cross-hauling of empty cars and in this connection I give below the following quotation from one of the railway books by an eminent American Railroad Transportation man :—

“When the general pooling of cars regardless of ownership is arranged, loading methods should be simplified, the cost of switching reduced and many economies introduced. The Committee of the American Railway Association on car efficiency is endeavouring to bring about this result and it will doubtless succeed. During car shortage period cars are pooled not theoretically but actually. Cars are pooled in Germany but the agreement for the co-operation of State Railways of the different States went into effect on April 1, 1909, and each State contributed certain proportion of cars for joint use. The spectacle of American railroads rushing a class of freight cars off their lines and loading other similar cars in the same direction, thereby hauling more cars than are necessary to move freight and cross-hauling empty cars, that is, empties in both directions at the same time, is a striking contrast to logical and business-like methods.”

27. I, however, do not know the result of the pooling of wagons on American railways. To my mind, pooling of wagons with short hauls would be more effective in countries like Germany or England within a comparatively shorter range, but with long hauls and in a vast country like India I do not know whether similar results can be easily attained.

28. In connection with the booking of rakes of empty wagons to the coal districts it is to be borne in mind that in great majority of cases empty wagons have to be hauled for long distances to the coal districts. It is only in isolated cases such as that of O. & R. Railway wagons bringing in grains and seeds, etc., to Howrah or Docks that they are (or can be) diverted to the coal district for the loading of coal for up country (or say to

be back loaded to the O. & R. Railway). In these cases also the Mining Engineer of the Railway Board and the Coal Transportation Officer co-operating with the Dock and Howrah Goods authorities could arrange for empty rakes of wagons to be labelled direct from Howrah or the Docks to the colliery so as to run them intact for purposes of loading the rakes with loco coal for O. & R. Railway.

29. There is one other point against pooling of wagons but perhaps it has received the attention of the authorities concerned. It is the pooling of high-tonnage wagons, say for instance the B. N. Railway 30-ton wagons are specially suitable for iron ore, manganese, etc., and for Dock traffic in coal, etc. Such wagons, if used on E. I. Railway and other Northern Indian Railways, with axle load restrictions, cannot have the full load and, therefore these wagons had better be kept on the B. N. Railway. This will avoid wastage of capacity and unnecessary haulage of excessive dead loads. The result of carriage of traffic in wagons in less loads than the capacity has been fully demonstrated on pages 287, 288 and 540 of my Monograph on Indian Railway Rates.

PROPER MARSHALLING OF COAL TRAINS TO FACILITATE TRANSPORT.

30. Then again I do not think it would be out of place to invite attention to the following extract from a publication issued by me in 1918 from the Army Press, Simla :—

“ A train of coal wagons for the N. W. Railway *via* Umballa would be started from the coal fields in Bengal with traffic to N. W. Railway stations alone if there were sufficient number of wagons loaded with coal for the N. W. Railway to make up a train load ; otherwise there would be a train of mixed wagons for the N. W. Railway and wagons for the E. I. Railway between the coal districts and Umballa. Those wagons that are for stations on the E. I. Railway below Umballa will be marshalled in station order, so that they can be cut off,

as the train proceeds along, by one shunting operation without disturbing other trucks on the train. But in respect to wagons for the N. W. Railway whether they run in complete train loads of wagons for the N. W. Railway *viâ* Umballa or in train loads of a mixture (containing say, wagons for the N. W. Railway *viâ* Umballa as well as for the E. I. Railway local stations and also say for *viâ* Agra for the G. I. P. Railway) the wagons or trucks for foreign railways (namely for the N. W. R. or the G. I. P. R. as mentioned here), would be grouped as for one station, *viz.*, Umballa or for Agra. That is the marshalling of such wagons in station order from Agra onwards or Umballa onwards would not be done by the E. I. Railway. Such work would be thrown on the G. I. P. R. and the N. W. R. staff to be done at Agra or Umballa junctions respectively. The traffic at least in coal for the N. W. R. and the G. I. P. R. is heavy. For a long time one idea prevalent in my mind has been that even if by detaining wagons say at Sitarampore, Asansol or Dhanbaid or Moghalsrai on the E. I. Railway or Adra on B. N. Railway for a day or two a full train load of wagons for the N. W. R. beyond Umballa or the G. I. P. R., and so on for other railways, could be made up and the wagons on the train marshalled in proper station order over the G. I. P. R. or the N. W. R., as the case may be, it will effect great economy in the long run and there will be a great advantage gained in turning round wagons quickly.

The idea of detaining loads to get through loads is not new. If coal wagons say for the N. W. R. or the B. B. & C. I. R., or G. I. P. R., can be detained say at Moghalsrai, on the E. I. Railway, or at Chakradharpore or Bilaspore on the B. N. R. to make up through train loads say for Lahore, Kurachee, Ahmedabad, Bombay, etc., it will pay to afford facilities to detain such wagons by construction of sidings for the purpose in large yards at such mentioned junctions or changing stations (if not at the colliery district train forming and despatching yards) for this will greatly assist in quick movement of wagons. When I wrote the above remarks in

1915 I was not aware that beneficial results had been attained on some American lines under such a practice. Last year, 1917, when the President of the Railway Board gave me Droge's book on Freight Terminals and Trains I saw the following remarks in that book :—"It is a very good general proposition to make up as many straight trains to distant points as can be assembled within a reasonable period of time. These trains should be made up solid for points as far distant as practicable. A general rule, under which cars are held for a solid train for any point to which there are sufficient cars to make up such a train every 24 hours, has worked out successfully on one road. In many instances, freight would be more expeditiously handled by holding 48 hours, or even longer——. Holding the cars at the original terminals for this purpose keeps them out of many intermediate yards and saves extra handling."

* * * * *

The object of marshalling trains is first to make up trains for one single destination.

Failing which attempts should be made to form trains with wagons so arranged as to run trains to furthest breaking point, *i. e.*, as near the destination as possible. In this matter the object should not be to get the trains through over each railway alone. The bulk of the traffic on Indian railways is through traffic, and as every railway (over which the traffic passes) on the same gauge is interested in turning round wagons quickly, the endeavour of railways should be to help each other by *marshalling being done for foreign lines as well, i.e., not for the local line alone.* For this purpose, a map shewing every station and a book with an index shewing each station in alphabetical order giving reference against each station name to the page on which such stations may be shewn in station order over each railway, branch, or section should be available at every changing station yard. I got out for the E. I. Railway such a book some years ago in connection with the routing of

coal traffic for the whole of India. The book can be used in number-takers' offices to help in marshalling.

This coal route table is perhaps yet in force on the E. I. Railway, but I wonder whether the B. N. Railway got out a similar table. For the utility and the facility which this table provides in getting away wagons from the coal districts I would refer to the last para. on page 283 and the first 20 lines on page 284 of my Monograph on Indian Railway Rates.

31. One and first of the three principal conclusions and recommendations of the Minority Report of the Coal Fields Railway Committee of 1920 was as follows :—

“That adequate transport facilities must be provided for the coal trade, that until this is done, it is unfair to expect mining methods to be much improved and that, when facilities are equal to the demand there will be no need for Government interference.”

The carrying out of the above recommendations as far as possible appears in the first instance one of the great solutions of the present difficulties before real conservation of coal can start and I have, therefore, put up this note as a contribution to the subject of coal traffic transportation.

53, LANSDOWNE ROAD,
Calcutta, the 21st July, 1921. }

S. C. GHOSE.

